AMERICAN

JANUARY • 1953

Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY

THEATRE
TELEVISION
INDUSTRIAL
AMATEUR

In This Issue . . .

- Plan Your Scenes In Sequence
- Techniques For Filming Exteriors
- Contribution of Photography To Production Value

25c

$3.00 YEARLY

"THE THIEF" takes top honors...

Du Pont "Superior" 2 captures proper moods in "no-dialogue" drama

"The Thief"—suspenseful thriller produced by Clarence Greene for United Artists and starring Ray Milland—is another smash picture made this year on Du Pont Motion Picture Film.

Not a word is spoken in the picture . . . so skillful camera work was essential to create the mood of the plot. "Superior" 2 Type 926 film provided the exact contrast and latitude needed.

Director Russell Rouse and Sam Leavitt, Director of Photography, combined their skills to meet a deadline which demanded shooting under the toughest weather and lighting conditions. Type 926 Film solved the problem . . . enabled the camera crew to obtain dependable results on every "take." Photo shows cast and crew atop the Empire State Building, 1050 feet above the sidewalks of New York.

Throughout the motion picture and television industries . . . for both interior and exterior shooting . . . leading cameramen rely on Du Pont products. In high- or low-key lighting, even under the worst conditions, these films assure bright, contrasty screen or kinescope pictures . . . outstanding sound recording. Whether you require a negative taking or positive stock, duplicating or special-purpose film . . . there's a dependable Du Pont product for the job. E. I. du Pont de Nemours & Co. (Inc.), Photo Products Department, Wilmington 98, Delaware.

In Canada: Canadian Industries, Ltd., Montreal.

DU PONT
REG U S PAT OFF

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

DU PONT MOTION PICTURE FILM

NEW YORK • LOS ANGELES • CHICAGO

Gene and Charlie Jones, NBC TV's famous twin team, examine one of their Bell & Howell "70" cameras in a Korean forward area.

NBC's newsreel men prove B&H cameras under fire

In the thick of the Korean action from the very beginning, the Jones Brothers have sent NBC-TV some of the finest War pictures ever filmed, including many exclusives. These movies were filmed under exceedingly tough and dangerous conditions. In fact, when Gene Jones was wounded in the chest at the Inchon invasion, he had to inch his way back to the beachhead through hundreds of yards of severe fire . . . protecting the precious film in his B&H "70" for NBC-TV *News Caravan* viewers.

Here's what the Jones Twins say about their Bell & Howell Cameras in a letter to Robert McCormick of NBC: "... We try to ship or shoot 500 feet per day. The Bell & Howell is a rugged little camera. Both of ours have been damaged in combat ... but we've managed to have them repaired by Signal Corps people."

Features of the New B&H 70-DL

3 Lens Turret Head for instant lens change; *Critical Focuser* permits precise focusing through the lens, *Viewfinder Turret* rotates positive viewfinder objectives to match lenses on lens turret, *Powerful Spring Motor* operates 22 feet of film on one winding ... maintains speed accurately throughout film run; *Hand Crank* for short double exposures, other trick effects and unlimited film run, *7 Film Speeds* include 8, 12, 16 (normal), 24 (sound) 32, 48 and 64 (true slow motion) frames per second, *Film Plane Mark* for accurate focusing measurement, *Parallax Adjustment* corrects from infinity to 3 feet, *Eyepiece* focuses for individual sight variations ... increases illumination to the eye up to 600%. Complete with 1" f/1.9 lens only, $365.50.

Price subject to change without notice

You buy for life when you buy

Bell & Howell

The Bell & Howell "70" camera is indeed a "rugged" camera. But that isn't the only reason why it is the favorite of professionals and ambitious amateurs. This camera is designed to make the highest quality movies, yet can be carried anywhere ... either hand held or set up in a matter of seconds to shoot under the most adverse conditions.

Guaranteed for life. During life of the product, any defect in workmanship or material will be remedied free (except transportation).

SEE IT AT YOUR CAMERA DEALER TODAY!

The Seal of Our Pledge to You....

...to bring to the screen in flawless manner the artistry of your photography

Hollywood's only complete LABORATORY SERVICE

CONSOLIDATED FILM INDUSTRIES
A DIVISION OF REPUBLIC PICTURES CORPORATION
959 N. SEWARD ST
PHONE HO 9-1441

AMERICAN
Cinematographer
THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY
PUBLICATION OF AMERICAN SOCIETY OF CINEMATOGRAPHERS

ARTHUR E. GAVIN, *Editor*
Technical Editor, EMERY HUSE — GLENN R KERSNER, *Art Editor*
Circulation, MARGUERITE DUERR

EDITORIAL ADVISORY BOARD: Fred W Jackman, A S C, John Arnold, A S.C, Arthur Edeson, A S C., Lee Garmes, A S C., Charles Rosher, A S C., Leon Shamroy, A S C., Fred Gage, A S.C, Dr L A Jones, A S C, Dr C E. K Mees, A S C

Editorial and Business Offices: 1782 N. Orange Dr., Hollywood 28, Calif
Telephone: GRanite 2135

VOL. 34 **JANUARY • 1953** **NO. 1**

CONTENTS

ARTICLES

SET LIGHTING INNOVATIONS MARK THE PHOTOGRAPHY OF '5000 FINGERS OF DR. T'—*By Arthur Rowan* . . . 16

SERVO MECHANISM FOR REMOTE CONTROL OF MITCHELL BNC LENS AND FINDER—*By John D McCullough* . . . 18

TECHNIQUES FOR FILMING EXTERIORS—*By Charles Loring* . . . 19

1952 BOX SCORE OF PRODUCTIONS FILMED BY ASC CAMERAMEN . . . 20

THE CONTRIBUTION OF PHOTOGRAPHY TO 'PRODUCTION VALUE'—*By Herb A. Lightman* . . . 22

45 YEARS IN CINEMATOGRAPHY—*By Hilda Black* . . . 24

AMATEUR CINEMATOGRAPHY

SAVE THOSE ODD SHOTS—THEY'RE 'MONEY IN THE BANK'—*By John Forbes* . . . 26

PLAN YOUR SCENES IN SEQUENCE—*By Leo J. Heffernan* . . . 28

FEATURES

HOLLYWOOD BULLETIN BOARD 6

WHAT'S NEW IN EQUIPMENT, ACCESSORIES, SERVICE 10

CLOSEUPS 12

ROSTER OF AMERICAN SOCIETY OF CINEMATOGRAPHERS—JANUARY 1, 1953 30

CURRENT ASSIGNMENTS OF ASC MEMBERS 40

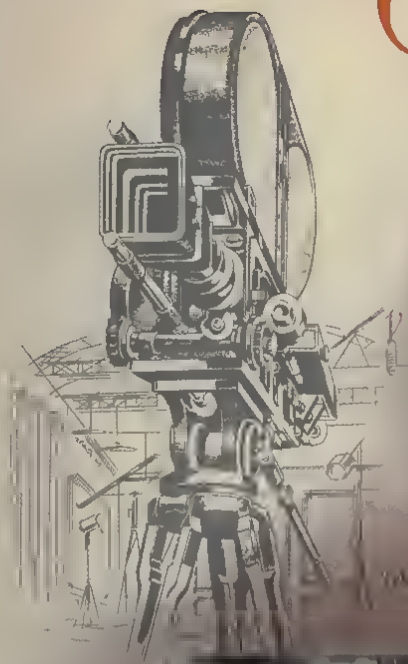
ON THE COVER

FOR SEQUENCES for their new musical, "By The Light Of The Silvery Moon," Warner Brothers converted one of the sound stages into a big ice rink. Here director of cinematography Wilfrid Cline, ASC, (on boom, wearing eye shade) and his Technicolor camera crew film a closeup of the sleigh party which includes (l to r) Leon Ames, Rosemary DeCamp, Mary Wickes, Billy Gray, Doris Day, and Gordon MacRae.—*Photograph by Jack Woods*

AMERICAN CINEMATOGRAPHER, established 1920, is published monthly by the A S C Agency Inc 1782 N Orange Dr Hollywood 28 Calif Entered as second class matter Nov 18 1937, at the postoffice at Los Angeles Calif under act of March 3, 1879 SUBSCRIPTIONS United States and Pan American Unions $3 00 per year Canada, $3 00 per year Foreign $4 00 Single copies 25 cents back numbers, 30 cents Foreign single copies 35 cents back numbers 40 cents Advertising rates on application Copyright 1953 by A S C Agency, Inc

PROUDLY CREATED TO *Outperform!*

Mitchell* CAMERAS



matchless technical perfection which a Mitchell camera brings to a fil[m] the investment as can no other single element of production.

[For] 25 years [re]search and engineering by Mitchell has [pro]duced [ev]ery year [a]dvanced, the most advanced and only truly professional motion picture ca[mera] [is] the [pro]fessional of Mitchell cameras that in addition to filming the world's [most] are to be found wherever new and exacting tec[hniques] being successfully used.

[Mitchell] Cameras [are] such varied fields as [Tele]vision, [Indus]try, Edu[cation], [Armed] Services, and [Motion] Picture Studios.

the 1 and only Mitchell

Tom Kelley Studios shoots a TV commercial for North American Airlines with this Mitchell 35 NC. Ceasar Romero is shown at center.

One [of] three Mitchell 35mm [used] Production on the "I Love Lucy" series with Desi Arnaz, right, and Lucille Ball.

[Cam]eras are [cre]ated, [ship]ped and s[erv]iced [with] pestil[e] 35 mm. Available to g[ive] the finest of professional

Mitchell Camera CORPORATION

666 WEST HARVARD STREET • GLENDALE 4, CALIFORNIA • CABLE ADDRESS: "MITCAMCO"

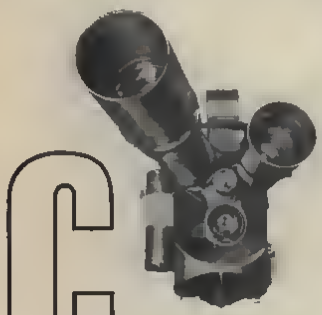
EASTERN REPRESENTATIVE: THEODORE ALTMAN • 521 FIFTH AVENUE • NEW YORK CITY 17 • MURRAY HILL 2-7038

85% of the motion pictures shown in theatres throughout the world are filmed with Mitchell

Q. *Why is the Camerette the world's most modern motion picture camera?*

A. Because the CAMERETTE with its functional shape, precision movement, and unique, rugged but light weight construction incorporates the newest ideas in camera design.

Reflex Viewing through the taking lens at all times — no parallax, no auxiliary finders necessary. Accurate framing and focusing of all scenes. **Instantaneous Magazine Loading.** No losses of action or waits while threading. Ideal for news, sports, medical photography... **Divergent Three Lens Turret.** No interference from shortest to longest focal length lenses. The only reflex motion picture camera able to use short focal length lenses, 18.5mm to 300mm available. **Adjustable Shutter** from 200° to 40°. **Rapid Dove Tail Mounting.** Simply slide the flat base of the CAMERETTE on the tripod and it's locked tight... **Complete Line of Accessory Equipment.** 6/8 volt motor drive, 110 and 220 single and three phase synchronous motors, hand gear box, tripod, matte box and filter holders, and focusing mounts for all principal makes of lenses... **and the 16/35 Camerette** has all the advantages of the 35mm CAMERETTE, *plus* the ability to use both film sizes interchangeably. The change-over is accomplished in a matter of seconds.



Camerette

patents coutant mathat

Manufactured by Ets. Cina. Eclair, Paris

for descriptive brochura
write U S representativa

Benjamin Berg Agency

6366 No. Van Ness Ave., Hollywood 28, Calif

Hollywood Bulletin Board

ARTHUR MILLER, ASC, is congratulated by Fred W. Jackman, ASC, following presentation of commemorative plaque to Miller at Society's December meeting

THE ASC paid special tribute to one of its old-time members, Arthur Miller, when at the Society's December meeting it presented him with a plaque commemorating his long and brilliant career as a cinematographer. Following the acceptance, Miller talked briefly on his early day experiences and introduced some of his old time co-workers.

A chapter of the old silent days serial, "Perils of Pauline"—which Miller filmed—was screened following the dinner. (More details on Arthur Miller's cinematographic career appears elsewhere in this issue. ED.)

•

CHARLES ROSHER'S long-anticipated retirement from the Hollywood motion picture industry became reality last month, when he and Mrs. Rosher flew to their island estate in Jamaica where they will settle permanently.

Speculation at this time indicates that Rosher will return to Hollywood at least once yearly to photograph a picture for his favorite MGM director, George Sidney.

•

KARL STRUSS, ASC, for the third consecutive year, was a member of the judging panel for the annual Sylvania Television Awards.

•

GEORGES BENOIT, one of ASC's old-time non-resident members, passed away last month in France. Benoit had been a member of the Society since 1921, and had served on its Board of Directors. In recent years he had operated a small motion picture theatre in a Paris suburb, and made it a point always to look up his American contemporaries whenever they were assigned to photograph a picture in France.

•

AL GILKS, ASC, had an interesting photographic assignment last month when he was selected to photograph two TV films in the series, "The Swayzes In Vacationland," featuring John Cameron Swayze of the Camel Caravan TV show. Most interesting part of assignment was shooting sequences in San Francisco's Chinatown. Using a Mitchell BNC camera and skeleton crew, Gilks followed a documentary technique in the filming throughout.

•

BUSIEST CINEMATOGRAPHER in Hollywood perhaps is Karl Freund, ASC. Besides shooting the weekly "Our Miss Brooks" TV show—the "I Love Lucy Show" group is vacationing pending Lucy's forthcoming blessed event—Freund has been delivering lectures or consulting with various companies on his light and color measurement techniques.

Since presenting his paper on "Shooting Live TV Shows On Film" at the SMPTE convention in Washington, D.C. last October, Freund's paper has been presented before groups in Los Angeles, San Francisco, Chicago, and Ottawa, Canada. Further presentations will be made in New York City and Dallas, Texas this month.

Freund, incidentally, is the only film cameraman to share in the 1952 Sylvania Awards. Last month he was presented with a Certificate of Merit for his "I Love Lucy Show" photography. The award cited him for outstanding achievement in creative television techniques.

KARL FREUND, ASC, is only cameraman to share in Sylvania TV Awards for 1952. Merit certificate was awarded him for filming "I Love Lucy" shows

HOUSTON-FEARLESS PANORAM DOLLY... This versatile piece of equipment provides the cameraman with complete mobility and adjustment of camera angles. Leveling head, upon which friction or geared head is mounted, can be quickly, smoothly raised from 14" to 70" high, remaining level at all times. Entire cantilever arm revolves easily on turret base fast or slowly. Dolly rolls smoothly, quietly, turns on its own axis or can be moved sideways. Very maneuverable in tight places. Steel and aluminum construction provides maximum strength and minimum weight. Top quality throughout. Developed and improved during many years use by leading Hollywood Studios.

Complete
CAMERA MOBILITY
means Better Pictures from Every Angle!

HOUSTON-FEARLESS RESEARCH COUNCIL CAMERA CRANE... Developed for the Motion Picture Research Council, Inc., and standard of major studios in Hollywood and throughout the world. Maximum flexibility. Provides lens height from 2 to 10 ft. from the floor, full 360° panning around the crane base, 340° panning around the camera axis and 100° up and down lift. Camera table has seats for operator and assistant, panning hand-wheel and adjustable friction-type turret brake. Boom is balanced on a center telescoping post with hydraulic lift. Panning and tilt brakes are adjustable to any degree of friction desired. Entire crane can be turned completely around in six foot radius. Will pass through doorway 3'x6'. Motor driven by new 5 h.p. DC motor. This is the finest of all camera cranes.

Write for information on specially-built equipment for your specific needs.

• DEVELOPING MACHINES • COLOR PRINTERS • FRICTION HEADS
• COLOR DEVELOPERS • DOLLIES • TRIPODS • PRINTERS • CRANES

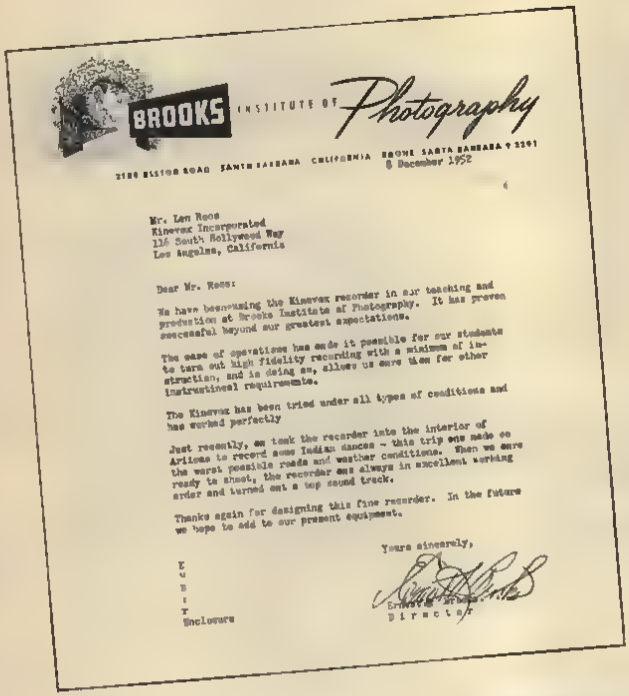
The **HOUSTON FEARLESS** *Corporation*

11809 W. OLYMPIC BLVD • LOS ANGELES 64, CALIF.

"WORLD'S LARGEST MANUFACTURER OF MOTION PICTURE PROCESSING EQUIPMENT"

"Thanks for designing this fine Recorder . . ."

— soys Brooks Institute of Photogrophy.



BROOKS INSTITUTE OF *Photography*

2190 ALSTON ROAD SANTA BARBARA CALIFORNIA PHONE SANTA BARBARA 7-2161

8 December 1952

Mr. Lee Ross
Kinevox Incorporated
116 South Hollywood Way
Los Angeles, California

Dear Mr. Ross:

We have been using the Kinevox recorder in our teaching and production at Brooks Institute of Photography. It has proven successful beyond our greatest expectations.

The ease of operations has made it possible for our students to turn out high fidelity recording with a minimum of instruction, and in doing so, allows us more time for other instructional requirements.

The Kinevox has been tried under all types of conditions and has worked perfectly

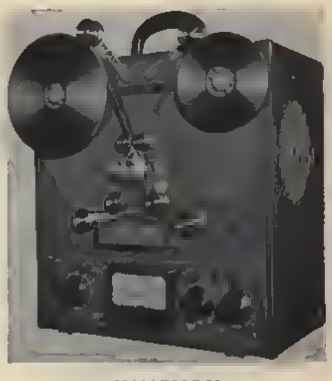
Just recently, we took the recorder into the interior of Arizona to record some Indian dances - this trip was made in the worst possible roads and weather conditions. When we were ready to shoot, the recorder was always in excellent working order and turned out a top sound track.

Thanks again for designing this fine recorder. In the future we hope to add to our present equipment.

Yours sincerely,

Director

Enclosure



KINEVOX
SYNCHRONOUS MAGNETIC RECORDER

More value for your money than any other similar equipment on the market today.

KINEVOX* **is the only company manufacturing a complete line of synchronous magnetic recording equipment for the professional . . .**

**Licensed under R.C.A., Armour Research Foundation and Kinevox patents.*

KINEVOX BUILOING
116 SO. HOLLYWOOO WAY
TELEPHONE. ROckwell 9-3291

KINEVOX
INCORPORATED

BURBANK
CALIFORNIA
CABLE: Kinevox, Burbank

ROME • BOMBAY • NEW YORK • RIO DE JANEIRO • CANADA

It's FUN to be FOOLED!

... but it's PROFITABLE TO KNOW that you can get Lip-Synchronized Sound WITH your Picture ...

at NO additional film cost with The Cine-Voice 16mm "Optical" Sound-On-Film Camera!

- ★ Run your 16mm High-Fidelity Optical-Sound-Track Talking Pictures on any ordinary 16mm sound projector.
- ★ No special equipment or film processing needed.
- ★ Shoot full-color or black and white.

$695.00 with a 30-day money-back guarantee. You must be satisfied. Write today for free illustrated "Cine-Voice" folder describing...
"THE CAMERA THAT HEARS WHAT IT SEES!"

BERNDT-BACH, INC.

7381 BEVERLY BLVD., LOS ANGELES 36, CALIF.

Auricon Hollywood

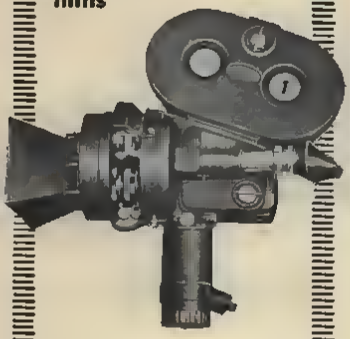
MANUFACTURERS OF SOUND-ON-FILM RECORDING EQUIPMENT SINCE 1931

ARRIFLEX

35mm
Model 11

A TRULY GREAT CAMERA

for TV, Newsreel and commercial films



For tough and trying assignments, ARRIFLEX 35 is in a class by itself. Reflex focusing through photographing lens while camara is operating—this is just one outstanding ARRIFLEX feature.

Equipped with bright, right-side-up image findar, 6½ x magnification. Solves all parollox problams. 3 lens turrat. Voriable speed motar built into handle operatas from lightweight battery. Tachomater registering from 0 to 50 frames per secand. Compact, lightweight for either tripod or hond-held filming. Tokes 200′ or 400′ magozina. Write for free folder.

FRANK C. ZUCKER
CAMERA EQUIPMENT CO.
1600 BROADWAY NEW YORK CITY

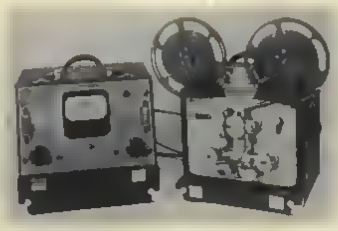
WHAT'S NEW

in equipment, accessories, service

Collapsible Camera Dolly — A new collapsible 3 wheel camera dolly is announced by National Cine Equipment, Inc., 209 W. 48th St., New York City. Constructed of sturdy cast aluminum, it folds into a single light-weight unit, provides

an adjustable spring seat for operator, and has extra-wide rubber-tired wheels for easy steering and added rigidity. Jack screws provide leveling or locking in stationary position. The dolly folds into a compact case 20″ x 20″ x 36″.

Kinevox In Canada — Kinevox, Inc., Burbank, Calif., announces that Perkins Electric Co., Ltd., with offices and display rooms in every province in Canada, has been appointed sole Canadian distributor of Kinevox synchronous magnetic film recorders and associated equipment. Len Roos, Kinevox president, reports increasing use of Kinevox recorders in the fast-growing Canadian film industry.



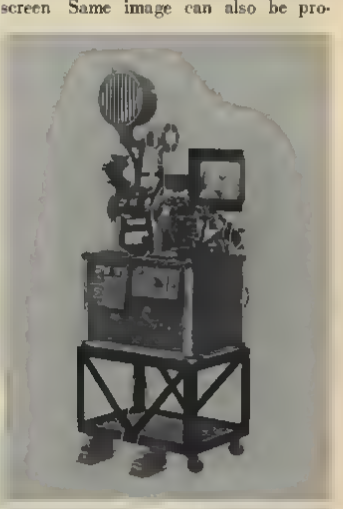
Magnasync Recorder — Magnetic Recorders Company, 7120 Melrose Ave., Los Angeles 46, Calif., announce the Magnasync, a new portable, synchronous magnetic film recorder which records on either 16mm or 17½mm single or double-perforated film, and sells for the remarkable low price of $1,275.00.

Designed for every professional use in film production, it features full 1200 ft film capacity, footage counter; sync motor drive; is adaptable to interlock; and weighs only 39 lbs.

Descriptive literature is available; also demonstration of equipment in the So. California area.

Acmiola Editing Machines — Acmiola Distributing Co., a division of S.O.S. Cinema Supply Corp., New York City, announces that 19 different models of Acmiola film editing machines are now available from the company, with shipments available within 3 months following receipt of order.

Design of the equipment provides familiar straight up and down threading. All machines have reversible variable speed motors, with foot and hand controls; an unusually sharp film image is projected on a 6″ x 8½″ shadow box screen. Same image can also be projected up to 3 ft. in width on separate screen, if desired.



All sound machines have built-in hi-fidelity power amplifier. Multiple-head models provide separate controls for each sound head with overall mixing gain control. A comprehensive illustrated catalog of Acmiola editing equipment is available.

Colortran Announcement — L. V. Grover, originator of the Colortran and the

(Continued on Page 45)

☆ARRIFLEX 35

MODEL II

The ideal 35mm movie camera for TV Newsreel, Industrial, Travel and Scientific Motion Picture Photography.

FAMOUS ARRIFLEX FEATURES:

- ReFlex focusing through taking lens, even when camera is running.
- Bright erect image finder, 6½ x magnification
- "Follow-focus" without assistant.
- No parallax or other finder problems.
- Full frame focusing and viewing.
- 3-lens turret
- Quick change geared film magazines (200 and 400 feet). No belts to connect
- Variable speed motor built into handle.
- Tachometer registering from 0 to 50 frames per second.
- Compact, lightweight.
- Equally adaptable for tripod or handheld filming
- Easily detachable matte box-filter holder.

JUAN E. VIGUIE JR., *Cameraman*

President of Viguie Films

Writes Mr. Viguie:

" . . of the two Arriflex 35mm cameras we own, one is in constant use in Puerto Rico and one in the States In addition to our regular work filming Viguie News, a Spanish language newsreel, we are frequently called upon to cover events for Telenews, Universal, and other major newsreel companies

The Arriflex 35 is my favorite camera because it gives me the results I want with little or no effort To be able to see the actual image on a large groundglass screen, even when filming, is a most wonderful thing, and it makes focusing and framing convenient and simple I also like the quickly interchangeable magazines, the electric motor drive with its small portable battery, eliminating tedious winding, and the fact that despite all this the camera is light enough for handheld shooting . ."

Now Available at leading Dealers
Write for latest literature and price list.

COATED LENSES in ARRIFLEX MOUNTS

28mm f/2 Schneider Xenon*	90mm f/3.5 Kilar
50mm f/2 Schneider Xenon*	T35mm f/3.8 Kilar
75mm f/2 Schneider Xenon*	150mm f/3.5 Kilar
*With Follow-Focus Grips.	300mm f/5.6 Kilar
	400mm f/5.6 Kilar

ORIGINAL ARRIFLEX ACCESSORIES

LENS EXTENSION TUBE for close-up filming and cinemacrography

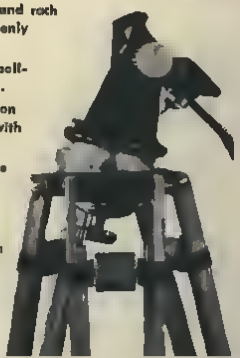
HI-HAT for mounting ArriFlex 35 on standard tripods

SHOULDER-POD for vibration-free, hand-held filming

BATTERY — 16 Volt, lightweight, non-spill, with carrying case and shoulder strap

BATTERY CHARGER

THE NEW ☆ARRIFLEX 35 TRIPOD



- Sturdy, rugged and rock steady. Weighs only 19 lbs.
- Large universal ball-joint for leveling.
- Velvet smooth pan and tilt action with separate locks.
- Extra long handle for under-arm control.
- Spirit level.
- Can be used with all professional cameras.
- Leather boot available.

KLING PHOTO SUPPLY CORPORATION

SOLE AGENTS 235 FOURTH AVE., NEW YORK 3, N. Y. • GRamercy 5-1120

WEST COAST REPRESENTATIVE: ABBOTT SYDNEY, 727 NORTH WESTERN AVE., LOS ANGELES 29, CALIFORNIA • GLADSTONE 6394

YOUR POSITIVE ANSWER

Perfect Precision Prints

MECHANICAL MEMORY . . .
AUTOMATIC CONTROL
. . . NO NOTCHING

Each individual film has its own Printing Control Strip, which determines printing exposures, filter changes (for color) and effects, and stores up this knowledge for transfer to the printing machine itself. This Control Strip permits exact duplication at any time.

YOUR ASSURANCE OF BETTER 16mm PRINTS

15 Years Research and Specialization in every phase of 16mm processing, visual and aural. So organized and equipped that all Precision jobs are of the highest quality.

Individual Attention is given each film, each roel, each scene, each frame — through every phase of the complex business of processing — assuring you of the very best results.

Our Advanced Methods and our constant checking and adoption of up-to-the-minute techniques, plus new engineering principles and special machinery enable us to offer service unequalled anywhere!

Newest Facilities in the 16mm field are available to customers of Precision, including the most modern applications of electronics, chemistry, physics, optics, sensitometry and densitometry—including exclusive Maurer-designed equipment—your guarantee that only the *best* is yours at Precision!

Precision Film Laboratories — a division of J. A Maurer, Inc., has 14 years of specialization in the 16mm field, consistently meets the latest demands for higher quality and speed

PRECISION
FILM LABORATORIES, INC.
21 West 46th St.,
New York 19, N.Y.
JU 2-3970

CLOSEUPS

Notes and Editorial Comment by the Editor . . .

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

ERNIE HALLER HOLLERS BACK!—It is incredible to what extent dissident factions in some foreign countries can read the most biased of thoughts into the reportings of the American press. It is a growing evil in which those dedicated to tearing down America and Americans make use of every opportunity to distort facts in an effort to discredit us before their people.

What brings all this up is a piece entitled "Ernie Haller 'Hollers'!" which appeared in a recent issue of *Blitz*, published in Bombay, India. The writer of the piece, hiding in by-line-less anonymity, says

"The camera does not lie, or so they say! But we know for a fact that a certain cameraman does, and has!! The gentleman concerned in the case is the much-feted cameraman, Ernie Haller of the Technicolor crew of "Monsoon" and "Jhansi-Ki-Rani," who, after a brief stay in this country, has, like other Americans, written an article about this land of ours."

Blitz's writer then goes on to criticise some of Haller's statements, reported in the article by Frederick Foster in the June, 1952, issue of AC

In rebuttal, Haller has written an open letter which he has titled "Ernie Haller Hollers Back!—in which he states

"Ernie Haller hollers back because, considering that at the time the article in question was written there was a possibility that I would return to India to photograph another picture, I certainly would not intentionally ridicule or belittle the Indian people who had aided me not only in my work but by their many kindnesses

"The interview, which culminated in Frederick Foster's story, was patterned on the American's working problems in another country Concerning the tea periods which I mentioned, and to which *Blitz* takes exception, why did not *Blitz's* critic quote my *entire* statement which said further ' . . . similar to the coffee breaks of the American worker.'

"As to re-educating my Indian staff to Western studio methods, every cameraman regardless in what foreign country he is assigned to photograph a picture, must school or re-train the native technicians assigned to work with him This is not to belittle the native worker, but the training is necessary in order to educate the technicians to the cameraman's own methods, admittedly essential

"My greatest difficulty, perhaps, was on the American production, "Monsoon," because of the *lack of equipment that had been promised me*, and the very long hours we were compelled to put in

"The color prejudice which the *Blitz* writer mentioned, is definitely not inferred anywhere in Foster's article, and is simply his own distortion of the facts I have travelled all over the world, have met and made many friends in many lands, and never once have I shown any prejudice of color or faith—for I live by my country's ways Freedom of speech, of color, and of creed

"To my producer in India, Mr Sohrab Modi and his charming wife Mehtab, I have only the very highest regard and wish them the greatest success with their picture "Jhansi-Ki Rani," of which I did a small part in the photography. And as for my associate cameramen, Mr Malhotra and Mr. Sarpodar, who were a constant help to me, I have never met two finer men anywhere.

—Ernie Haller."

SEVEN out of 10 winners used Bolex!

MAXIM AWARD WINNER AS WELL AS 6 OTHER WINNERS IN ACL "BEST AMATEUR MOVIE DF 1952" PREFERRED THE VERSATILE BDLEX!

Bolex joins with the Amateur Cinema League in offering heartiest congratulations to Mr. & Mrs. T. Lawler and the 9 other 1952 prize winners. Seven Bolex users out of 10 prize winners, and in addition, 5 Bolex users out of 12 honorable mention winners, are a positive indication that Bolex versatility SWEEPS THE FIELD! Listen to what they say about Bolex!

Mr. & Mrs. T. Lawler, Kenosha, Wisconsin
"Our Bolex is the only movie camera we have used, and it has seen much service since we bought it in 1943. It has made the 'Ten Best' twice before."

Mr. Haven Trecker, Kankakee, Ill.
"My Bolex H-16 has come through for me again!"

Mr. A. T. Bartlett, Queensland, Australia
"My Bolex is a joy to use; with it I have made four award-winning films."

Mr. Mathis Kverne, Oslo, Norway
"My whole film was taken with the Bolex single-frame setting. It worked perfectly all the time. I would not change my Bolex for any other."

Mr. Geo A. Valentine, Glenbrook, Conn.
"I chose the Bolex H-8 because it's the only 8mm camera that has all the features needed for professional effects."

Mr. Robt. G. Williams, Toledo, Ohio
"I like my Bolex because its built in features let you know right where you are every moment."

Mr James L. Watson, Worcester, Mass.
"Movie makers express themselves through their films. I insist on perfection. My Bolex speaks for me."

Thank you, Bolex fans, for your vote of confidence. Read in BOLEX REPORTER how prize-winners made their movies

Bolex Owners . . . *register your serial numbers with us and receive regular mailings of this 25¢ magazine free. Overseas subscriptions $2.00 four issues.*

Paillard Products, Inc., 265 Madison Ave., N. Y. 16, N. Y.

Bolex® brings the best to 8 and 16mm Movie Making!

In Studio... or on Location...

the new "Balanced" TV Head is doing a whale of a job every day

"BALANCED" TV HEAD

We threw the book away and engineered a brand new "BALANCED" Tripod for every photographic and video need. The result—a revelation in effortless operation, super-smooth tilt and 360° pan action.

PERFECT BALANCE prevents mishap if the lock lever is not applied. Quick release pan handle locks into desired position. Mechanism is enclosed, rust-proof, needs no lubrication. Tension adjustment for Camera Man's preference. Built-in spirit level. Telescoping extension pan handle. We defy you to get anything but the smoothest, most efficient operation out of this tripod beauty.

VARIABLE SPEED MOTOR—110 Volt AC/DC—with Tachometer for EK Cine Special

Motor drive your Cine Special with confidence! Tachometer is mounted in clear view of operator. Calibrated from 16 to 64 frames per second. Definite RED marking for 24 fps. Electrical governor adjusts speeds. Steady operation at all speeds. No adapters needed. Motor coupling attaches to camera and couples to motor. Spring steel drive arm shears if film jam occurs. Easily replaced.

HEAD ILLUSTRATED CONTAINS ADJUSTABLE CAMERA TIE-DOWN SCREW FOR LOCATING CENTER OF GRAVITY. THIS FEATURE IS OPTIONAL.

SYNCHRONOUS MOTOR DRIVE—110 Volt AC—Single phase, 60 Cycle

Runs in perfect synchronization with either 16mm or 35mm Sound Recorders. Mounting platform permits removal of magazine while camera remains mounted on motor. Spring steel drive pin coupling prevents damage if film jam occurs.

Knurled knob on armature permits rotating for threading. "On-Off" switch in base. Platform base threaded for ¼" or ⅜" tripod tie-down screw. Rubber covered power cable with plugs included.

PROFESSIONAL JUNIOR TRIPOD—Friction Type

Handles all 16mm cameras, with or without motor. Also 35mm DeVry, B & H Eyemo with and without motor, and 400' magazines. Tripod base interchangeable with Professional Junior gear drive head, "Baby" tripod base and "Hi-Hat" base available.

If you work with film... for Studio, Newsreel, Commercials, Business, Industrial or Home Movies—it will pay you to get to know us. The country's foremost professionals depend upon our portable, versatile, adaptable equipment

ARRIFLEX Cameras

We Rent and Service
*Cameras * Moviolas * Dollies*

Complete line of 35mm and 16mm equipment available for rental

MITCHELL: Standard, Hi-Speed, BNC, NC, 16mm
BELL & HOWELL: Standard, Shiftover, Eyemos
MAURER: 16mm Cameras
MOVIOLA: Editing machines, Synchronizers

We Design

and manufacture Lens Mounts and camera equipment for 16mm—35mm and TV cameras.

FRANK C. ZUCKER
CAMERA EQUIPMENT CO.
1600 BROADWAY NEW YORK CITY

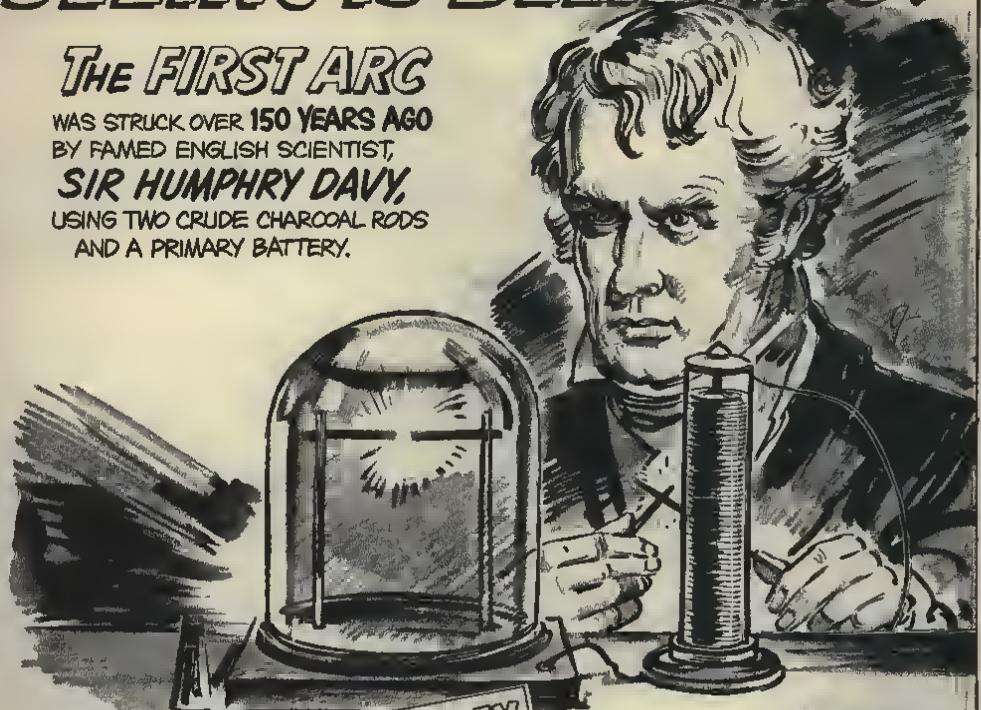
We Calibrate Lenses Precision "T" STOP CALIBRATION of all type lenses, any focal length.

Our method is approved by Motion Picture Industry and Standard Committee of SMPTE. For proper exposure density, it is important that you have your lens "T" stop calibrated. Lenses coated for photography. Special TV coating. Rapid service.

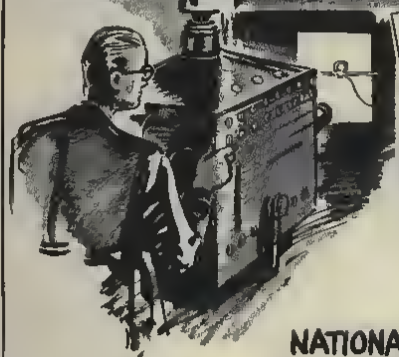
SEEING IS BELIEVING!

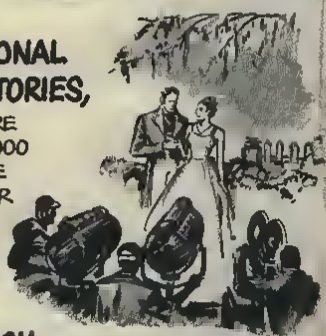
THE FIRST ARC

WAS STRUCK OVER **150 YEARS AGO**
BY FAMED ENGLISH SCIENTIST,
SIR HUMPHRY DAVY,
USING TWO CRUDE CHARCOAL RODS
AND A PRIMARY BATTERY.



TODAY, IN NATIONAL CARBON'S LABORATORIES,
EXPERIMENTAL CARBONS ARE OPERATED AT MORE THAN 2000 FOOTCANDLES PER SQUARE MILLIMETER... MUCH HIGHER THAN THE APPARENT BRIGHTNESS OF THE SUN!





NATIONAL CARBON RESEARCH PAYS OFF IN THE DEEP SET PENETRATION, BROAD COVERAGE, SHARP SHADOWS AND RELATIVE COOLNESS THAT RESULT FROM THE HIGH EFFICIENCY AND SMALL SOURCE SIZE OF "NATIONAL" CARBON ARCS.

THE "NATIONAL" CARBON ARC... NOTHING BRIGHTER UNDER THE SUN

The term "National" is a registered trade-mark of Union Carbide and Carbon Corporation

NATIONAL CARBON COMPANY

A Division of Union Carbide and Carbon Corporation, *30 East 42nd Street, New York 17, New York*

District Sales Offices Atlanta, Chicago, Dallas, Kansas City, New York Pittsburgh, San Francisco

IN CANADA: National Carbon Limited, Montreal, Toronto, Winnipeg

Set Lighting Innovations Mark The Photography of '5000 Fingers of Dr. T.'

Frank Planer used reflected, ultraviolet, and fluorescent light in revolutionary new ways in photographing Kramer's fantasy film.

By ARTHUR ROWAN

A FANTASTICALLY CREATIVE masterpiece of wild imagination has opened the eyes of all Hollywood—eyes which over a long period have become accustomed to spectacle in virtually every shape, shade and form.

The picture in question is the Kramer Company's musical extravaganza in Technicolor, "The 5000 Fingers of Dr. T.," conceived as an entirely new and vital approach to entertainment via movies.

Director of photography Frank Planer, ASC, added a new touch to the filming of "5000 Fingers" when he devised a means of changing lighting and color before the very eyes of the moviegoer by interspersing use of ultraviolet and fluorescent light. Another innovation was the use of the new cone lights, developed by Columbia Studios' electrical department and described in American Cinematographer for June, 1952 (Pp. 248). Cone lights are said to produce the broadest and most distant "shadowless" light ever attempted in motion picture production. Planer found them made to order for lighting the sets of this production.

"The 5000 Fingers of Dr. T." comes to the screen as a vision, the dream world of a nine-year-old boy. It is painted his way, not Rembrandt's way. The sets are crookedly fantastic as a small boy would draw them. The entire picture is

FILMING A CLOSEUP of Hans Conreid for "5000 Fingers of Dr. T." Here director of photography Frank Planer uses his famous "Houdini" eye light on Conreid as the camera rolls for the scene.

GENERAL VIEW of the piano courtyard scene, said to be largest ever constructed in Hollywood, shows the lighting pattern followed by cameraman Planer. The cone lights may be seen mounted overhead as well as on floor standards. Planer and his camera are on parallel at left.

A CLOSER LOOK at same set. Hans Conreid (Dr. T.) is being filmed in close-up directing his boy piano pupils seated at giant keyboard. Here, cone lights augmented by 8-rules illuminate the scene. Wall of set reaches to stage ceiling, is made entirely of white muslin.

wildly imaginative, as only a small boy can imagine. And contributing most effectively to the overall pictorial effect is Frank Planer's unique lighting for the Technicolor photography.

Briefly the story concerns a typical American boy whose mother has her heart set on him becoming a piano virtuoso. His teacher is Dr. Terwilliker (Dr. T.) who shares the mother's view that the lad will learn to play the piano, "even if I have to keep him at that keyboard forever!" One day when the lad would rather be outdoors playing baseball than practicing his piano lessons, he falls to daydreaming. Dr. Terwilliker becomes an ominous ogre with 500 little boys trapped in his vast piano courtyard. Here the boys are destined to sit at the giant keyboard practicing 24 hours a day, 365 days a year—5000 fingers practicing the scales in unison.

The lad seeks to escape from Dr. T, and what he encounters in weird and fantastic dream situations makes for one of the most entertaining pictures of the year—and made for Frank Planer perhaps the most challenging assignment in color photography of his entire career.

To begin with, Planer faced something radically new in sets from the standpoint of lighting. According to him, "5000 Fingers" utilizes more sets than any picture in his recollection: at one time sets for the production occupied every sound stage on the Columbia lot.

Largest set in the film and one of the biggest ever to grace a motion picture screen was the giant piano courtyard of Terwilliker land, which occupied all of stages 8 and 9 at Columbia Studios. Its biggest feature, of course, was the longest piano keyboard ever built.

Stretching the length of the immense courtyard which featured weird staircases, entrances to bottomless dungeons and topless staircases, the piano completely dominates the scene. The courtyard set, one of the costliest ever built on the Columbia lot, was constructed mostly of battens covered with white muslin. 3500 square yards of it, instead of the conventional wallboard. The reason, of course—economy. But this placed a tremendous burden on director of photography Planer, for unlike with sets of solid construction, he faced innumerable problems in lighting. The muslin, being translucent, precluded placing lights in rear of the sets, unless certain areas were carefully goboed or backed up with wallboard flats, black backing material or both. In lighting the narrow staircases, special cutouts were mounted before the lamps in order to funnel the beam of light so it wouldn't strike the muslin covering of the sets and thus reveal the flimsy construction.

The lighting equipment Planer used is one of the interesting highlights of the production. The cone lights, which Columbia lighting engineers had just introduced for test purposes, were used in large scale for the first time in "5000 Fingers." Planer had observed them during the tests, decided they were the ideal light source for illuminating the tremendous areas of the larger sets. The cone lights give a reflected illumination of soft, "shadowless" quality, are capable of lighting larger areas than most other type set lighting units, and greatly reduce rigging and maintenance costs. In all Planer used 24 cone lights and 6 arcs (Brutes) for set lighting.

Hydraulic parallels were widely used, both for camera and key lights. These proved most ideal whenever camera position was changed, the lamp parallels were simply rolled to another position and the platform lowered or elevated according to the key light height desired. In many cases, the hydraulic parallel proved a better mount for the camera than a crane because of the greater height range. This was especially true when filming on the huge piano courtyard set which required shooting from great heights.

The most challenging problem, of course, was how to get detail and modeling into the all-white muslin covered sets. Although the contour of walls, staircases and other details were readily apparent to the eye, no detail had been emphasized through painting of the sets. This was left to Planer, whose challenge was to so light each set that details were brought out with contrasting shadows, and by delicately shading the light on set walls and background to give the desired separation. The scenes on this set were perhaps the only ones filmed in full scale lighting and embracing the complete range of color.

When the company moved to the dungeon and the Mound Country sets, both photography and lighting assumed a completely new pattern. Here the boy's experiences in attempting to escape his dilemma were staged. Pointing up the mood were the dark, low-key sets, the eerie mood lighting contrasting with the metallic coloring of the mouldy characters in the

(Continued on Page 42)

FANTASTIC dungeon scene involved tricky low-key lighting, use of ultraviolet and fluorescent light for weird effects. As with most scenes in this sequence, action on this set was generally shot with camera on crane and well elevated.

TOMMY BETTIG flees from the terrible butterfly man on this set of the fabulous Mound Country. Planer used eerie green light and grey smoke to give the scene the desired awesome effect. The camera, mounted on crane at left, followed the action in closeup. Cone lites and arcs supplied illumination.

FIG 1—Remote control motor drive is attached to the Mitchell BNC at point at lens knob on side of camera opposite the finder. Motor is a split-phase, high-torque, low-inertia unit designed for the installation

Servo Mechanism For Remote Control of Mitchell BNC Lens and Finder

By JOHN D McCULLOUGH

Camera Engineer, Columbia Pictures Corp

LAST MONTH Frederick Foster described some interesting methods that have been developed in recent years to facilitate automatic or remote control of lens and finder of motion picture cameras when making follow-focus shots. More recently a Servo motor driven remote control for the Mitchell BNC camera has been developed by John D McCullough, Columbia Pictures camera engineer, which he describes in the following article.—EDITOR

THE SCIENCE OF Servo Mechanisms concerns itself in this application with getting a lot of work done at the output end of a system with a minimum of manual work at the input, and with an accurate position relationship maintained.

The nature of the mechanical design of the Mitchell BNC camera is such that efforts thus far to control the lens focus and finder focus and parallax through use of hydraulics, selsyns, flexible cables, etc, have met with little success.

The gear train, lens barrel friction, finder cam, finder lead screw and finder spring loading all contribute to a friction drag which on the camera tested required a torque of 50 inch ounces before the system would move.

The approach to the Servo Mechanism specifications was to add to this torque requirement an arbitrary maximum speed for focus change requirements. This was established at one revolution at the lens in four seconds: a figure which will handle most focus change problems with a generous margin.

The complete system consists of the hand control (Fig. 2), carried remotely from the camera by the assistant, the motor unit which couples to the camera (Fig. 3), the electronic amplifier, and necessary connecting cables.

In the basic Servo Mechanism circuit, the hand control potentiometer and the camera unit potentiometer are used to generate a low voltage position error signal when the manual control is moved. The motor is stationary when the potentiometer sliders are at a null point. With the least condition of unbalance the resulting voltage is amplified and supplied to the variable winding of the motor in correct phase to drive it in a direction to cancel the error.

The motor is a split-phase, high torque, low inertia unit designed for this type of application. One winding is supplied continuously with 110 volt 60 cycle and the other winding is supplied from the amplifier circuit as outlined above. The motor effects a cancellation of the potentiometer error

(Continued on Page 37)

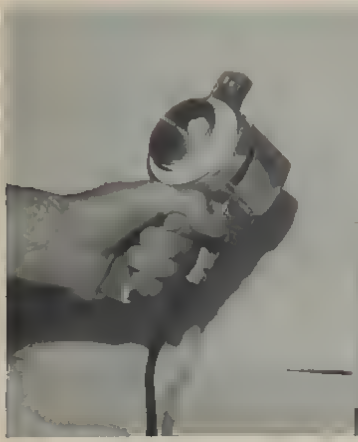


FIG 2—In the hand control, the dial is identical with that on the camera, three turns of control knob is equivalent to approximately 330° turn of lens diaphragm

FIG 3—Motor unit which couples to the camera and actuates the lens control knob. When mounted, it appears as shown above in Fig 1.

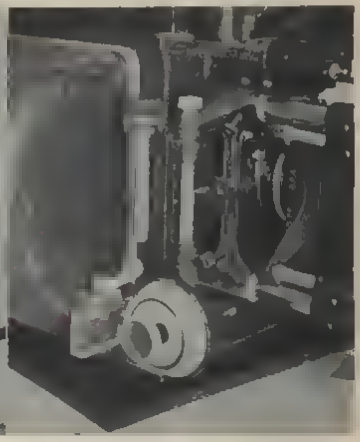


FIG 4—The fine adjustment knob of camera lens (lower left) is broached to fit the serrated output fitting of the servo motor unit shown opposite in Fig 3

SCRIMS of gauze or netting are an important adjunct to filming exteriors in sunlight. As shown here, a scrim placed out of camera range between subject and sun, breaks up harsh light of the sun

REFLECTORS are a must on outdoor shots where booster lights are not available. Their function is to throw light into shaded areas of the set. Often both reflectors and booster lights are used, as shown above

Techniques For Filming Exteriors

Some of the basic practices which contribute to successful outdoor photography are explained here for the student of cinematography.

By CHARLES LORING

THE PROBLEMS ENCOUNTERED in the shooting of an exterior motion picture sequence arise, parodoxically enough, from the rather over abundant generosity of Nature. That is to say, our main concern in outdoor filming is not so much to secure the basically necessary photographic elements (light, backgrounds, etc.), but to *control* these elements that have been so lavishly placed at our disposal.

In modern professional practice, a substantial amount of exterior sequences are shot inside sound stages because of the firmer control the technician can exercise over the mechanical factors of photography. However, for the semi-professional producer, the outdoors offers an infinite number of perfect photographic backgrounds, a strong and constant source of light, and infinite room in which to stage action and place equipment.

Ways and means of controlling these elements are basic, and once learned, can be followed consistently with good results. Taking for granted that the reader knows these fundamental techniques, we shall discuss some of the finer points of photography necessary to the filming of exterior sequences.

Granted that there are many factors that influence the overall excellence of exterior cinematography, it can be said with emphasis that the most important single influence on general quality is *correct exposure*. Even with present-day wide-latitude emulsions and modern methods of processing geared to compensate for faulty exposure, the fact remains that a perfect scene results only when the exposure has been calculated "on the nose."

In order to achieve this result, the cameraman must consider, not only the mechanical requirements of his scene, but *the particular kind of processing which will be given his film after exposure*. For this reason, he will be wise to run tests at standard exposures and send them off to the lab for processing in order to find out what is the standard of development for that particular lab. No two laboratories process film in exactly the same way, and the cameraman must make inquiries in order to adjust his exposure techniques (as well as his own evaluation of the film's speed) to the particular lab that is processing his film.

A good many novice cinematographers have asked the question: "What

CAREFUL use of a good meter in determining exposure insures consistently good photography throughout the picture. Here cameraman takes reading of incident light with a meter made for the purpose.

do you expose for in the scene?" and they seem intent upon finding a rule to follow. Obviously, no one rule could possibly cover every situation, but in general we advise *exposing for the most important element in the scene*. Another rule that is an old standby of cameramen is: *Expose for the shadows and let the highlights take care of themselves*.

Actually, neither of these rules of thumb should be taken too literally nor do they apply in every case. The basic problem (within the latitude of the film) is to expose in such a way that the light areas are not *overexposed* and the dark areas are not *underexposed*. This depends partially on careful selection of film emulsion, but even more so upon control of the amount of light that reaches the film.

Very often, in using high-speed films,

(Continued on Page 42)

1952 BOX SCORE

79 A S C CAMERAMEN **filmed** **290** HOLLYWODO FEATURE FILMS

Freulich, Neumann

OVER 300 FEATURE FILMS were produced in Hollywood during 1952. Of these, 290 were photographed by 79 ASC cameramen. Topping the list in number of feature film assignments are Henry Freulich, Harry C. Neumann and Ernest Miller—each of whom directed the photography of eleven Hollywood productions, indicating these three men were among the busiest cinematographers in Hollywood during the past year.

Lloyd Ahern
"The Silver Whip," Fox.

John Alton
"Mr. Congressman," MGM
"Apache Trail," MGM.
"Battle Circus," MGM
"Thirteenth Man," Ben-Bo Prod.
"The San Quentin Story," Swartz-Doniger

Arthur Arling
"The Farmer Takes A Wife," Fox.

Lucien Ballard
"Don't Bother To Knock," Fox.
"Night Without Sleep," Fox
"Baptism Of Fire," Fox.
"The Number," Fox
"The Desert Rats," Fox

George Barnes
"Famous," Para
"War Of The Worlds," Para.
"Road To Bali," Para.
"Little Boy Lost," Para

Joseph Biroc
"Red Planet," Ind.
"The Twonkey," Oboler.
"Loan Shark," Ind.
"The Glass Wall," Shane Tors.
"Bwana Devil," Oboler
"The Tall Texan," Woods.
"Harness Bull," Sequoia.

Charles Boyle
"Untamed," U-I.
"The Texas Man," U-I
"City Beneath The Sea," U-I.
"Roughshod," U-I.
"Column South," U-I.
"The Stand At Apache River," U-I.

William Bradford
"Barbed Wire," Col.
"Port Sinister," Amer
"Wagon Team," Autry.
"Blue Canadian Rockies," Autry
"Winning Of The West," Autry
"On Top Of Old Smoky," Autry
"Goldtown Ghost Riders," Autry.
"Pack Train," Autry.

Fayte Browne
"Rough, Tough West," Col.
"Kid From Broken Gun," Col.

Robert Burka
"Maru Maru," W.B
"The Desert Song," W B
"I Confess," W.B.
"The Grace Moore Story," W B

Ellis W. Carter
"Rainbow 'Round My Shoulder," Col.
"Outlaw Women," Ind.

Charles G Clarke
"Sixty Saddles For Gobi," Fox.
"Stars And Stripes Forever," Fox.
(Untitled Western), Fox.

Wilfrid Cline
"She's Working Her Way Thraugh College," W.B.
"The Story of Will Rogers," W B
"By The Light Of The Silvery Moon," W.B.
"April In Paris," W.B.

Stanley Cortez
"Models, Inc.," Ind.
"Abbott and Costello Meet Captain Kidd," Woodley
"China Gold," Wisberg Pollexfen
"The Neanderthal Man," Wisberg-Pollexfen.

Edward Cronjager
"Cry of The Swamp," Fox.
"Condor's Nest," Fox
"Bloodhounds of Broadway," Fox.
"Powder River," Fox.

Floyd Crosby
"Man Crazy," Security Prod.

William Daniels
"Glory Alley," MGM
"Pat and Mike," MGM.
"Plymouth Adventure," MGM.
"Thunder Bay," U-I.
"Never Wave At A WAC," Ind. Artists-RKO.

Clyde DeVinna
"The Jungle," Voltair Prod.

George Diskant
"Kansas City I-I-7," Assoc. Players.
"The Bandits of Corsica," Edw Small.

Edwin DuPar
"The Miracle of Our Lady of Fatima," W B.
"The Springfield Rifle," W.B.
"She's Back On Broadway," W B
"The System," W.B.

Daniel Fapp
"Jumping Jacks," Par
"Pleasure Island," Par.
(Untitled), Par

George Folsey
"The Million Dollar Mermaid," MGM.
"The Band Wagon," MGM

Henry Freulich
"Junction City," Col
"Prince of Pirates," Col.
"The Last Train From Bombay," Col
"The Pathfinder," Col.
"Jack McCall, Desperado," Col.
"Target—Hong Kong," Col
"Serpent of the Nile," Col.
"Slaves of Babylon," Col
"Ambush At Tomahawk Gap," Col
"Flame of Calcutta," Col.
"Conquest of Cochise," Col.

Lee Garmes
"This Man Is Mine," RKO

Maury Gertsman
"Red Ball Express," U-I
"The Girl Across The Street," U-I.
"It Grows On Trees," U-I.
"The Great Companions," U-I.
"Sioux Uprising," U-I.
"Lone Hand," U-I
"The Golden Blade," U-I.

Alfred Gilks
"See How They Run," MGM.

Irving Glassberg
"Claim Jumpers," U-I.
"Sally and St Ann," U-I.
"The Black Castle," U-I.
"Gun Hand," U-I.
"Mississippi Gambler," U-I.

W. Howard Greene
"Swords Before The Mast," Edw Small.
"Toobstone Trails," Edw. Small

Burnett Guffey
"Assignment Paris," Col
"Posse," Col

Carl Guthrie
"Francis Goes To West Point," U-I.
"The Riding Kid," U-I
"Bonzo Goes To College," U-I.
"The Jazz Singer," W B
"Night Flowers," U-I
"Stopover," U-I.

Russell Harlan
"The Ring," Ind.
"Ruby Gentry," Ind.

Sidney Hickox
"Alexander, The Big Leaguer," W B

Winton Hoch
"Cattle Kate," U-I
"Return To Paradise," Aspen.

James Wong Howe
"The Fighter," G&H.
"Come Back Little Sheba," Para
"Main Street To Broadway," Cinema Prod

and E. Miller Top Scorers With 11 Films Each

Other directors of photography were equally busy. Whereas Freulich's, Neumann's and Miller's assignments were low-budget, short-shooting-schedule productions, many cameramen on contract with major studios were, on the average, busy behind their cameras 40 to 48 weeks out of the year's 52 by virtue of the longer schedules of the higher budget productions which they filmed.

This survey, of course, does not include ASC men engaged in photographing films for television—a field which saw increasing activity during 1952. Nor does it include ASC members located outside Hollywood, such as Jack Cardiff and Freddie Young, of England, and Joseph Brun and Don Malkames of New York City, all of whom were unusually active during the year. ASC cameramen and their feature film assignments for 1952 are listed below.

Harry Jackson
'Way Of A Gaucho," Fox
Pony Soldier," Fox.

Ray June
'Eagle On His Cap," MGM
"Sky Full Of Moon," MGM
"Sombrero," MGM
"Code Two," MGM
"A Slight Case of Larceny," MGM

Milton Krasner
"Dream Boat," Fox.
"Monkey Business," Fox.
'Bagdad on the Subway," Fox
"Dream Wife," MGM
"Taxi," Fox

Charles Lang
"Sudden Fear," RKO
'Salome," Col.

Joseph LaShelle
"Les Miserables," Fox.
'Something for the Birds," Fox
'My Cousin Rachel," Fox.

Ernest Laszlo
'Stalag 17,' Par.
"Panic Stricken," Thor.
"Scared Stiff," Par
"The Star," Thor
"Houdini," Par
"The Steel Trap," Thor.

Charles Lawton
The Saber and the Arrow," Col.
"The Happy Time," Col
"The Outlanders," Col.
All Ashore!" Col.
Love Song," Col.

Marcel LaPicard
"The Congregation," P.F. Heard
'Jet Job," Mono
Plow Jockeys," Mono

Lionel Lindon
'Caribbean Gold," Par
"Tropic Zone," Par
"The Stars Are Shining," Par.
"Rock Grayson's Women," Par
'Jamaica," Par
'Here Come The Girls," Par.

Harold Lipstein
'Fearless Fagan," MGM.
"The Desperate Search," MGM
"Cry Of The Hunted," MGM
"Fast Company," MGM
"A Steak For Connie," MGM

Joseph MacDonald
What Price Glory," Fox.
"The Full House," Fox.
"Niagara," Fox.
"Blaze of Glory," Fox.
"Nearer My God To Thee," Fox.

Pevensll Morley
"Military Policeman," Par.

Ted McCord
"Danger Forword," W B
"Stop, You're Killing Me!" W B
"Cattle Town," W.B.

William Mellor
"Carbine Williams," MGM.
"Letter From The President," MGM
"The Naked Spur," MGM.
"Give A Girl A Break," MGM.

Russell Metty
"Scarlet Angel," U-I.
"Against All Flags," U-I.
"Yankee Buccaneer," U-I.
"Magic Lady," U-I.
"Seminole," U-I
"Man From Alamo," U-I.
"Flame of Timberline," U-I.
"The Prince of Bagdad," U-I.

Ernest Miller
"Dead Man's Trail," Mono.
"Hellgate," Comm Films
"Barbed Wire," Mono.
"The Maverick," Mono
"Battle Zone," Allied Artists
"Guns Along the Border," Mono.
"Hired Guns," Mono
"Star of Texas," Allied Artists
"Stranglehold," Mono
"The Homesteaders," Mono.
"The Copperheads," Mono.

Victor Milner
"Jeopardy," MGM.

Hal Mohr
"The Member of the Wedding," Col.
"The Four Poster," Col

Nick Musuraca
"Clash By Night," RKO.
"The Difference," Filmakers-RKO.
"Split Second," RKO.
"The Blue Gardenia," Gottleib Prod.

Harry C. Neumann
"Wild Stallion," Mono
"The Rose Bowl Story," Mono.
"Army Bound," Mono
"Flat Top," Mono.
"Hiawatha," Mono.
"The Royal Mounted Police," Allied Artists
"Son Of Belle Starr," Allied Artists
"Jungle Girl," Mono.
"The Roar of The Crowd," Allied Artists
'Kansas-Pacific," Allied Artists
"Jalopy," Allied Artists

Robert Planck
"Lili," MGM
"Remains To Be Seen," MGM
"My Mother and Mr. McChesney," MGM.

Frank Planer
"The 5000 Fingers of Dr T," Col.
"Roman Holiday," Para.

Ray Rennahan
"Hurricane Smith," Par
"Pony Express," Par
"Arrowhead," Par.

George H. Robinson
"Lost In Alaska," U-I.

Charles Rosher
"The Story of Three Loves," MGM.
"Young Bess," MGM.

Harold Rosson
"Three Love Stories," MGM
"I Love Melvin," MGM
"Dangerous When Wet," MGM
"Years Ago," MGM.

Jack Russell
"Sword of Venus," RKO
"Park Row," Fuller
"Arctic Flight," Mono.
"The Velvet Cage," Ind
"The Monster From Beneath The Sea," Mutual
"The City That Never Sleeps," Republic

Joseph Ruttenberg
"Because You're Mine," MGM.
"The Prisoner of Zenda," MGM
"Small Town Girl," MGM
"Julius Caesar," MGM
"Latin Lovers," MGM

John F. Seitz
"Botany Bay," Par.
"The Iron Mistress," W B
"Desert Legion," U-I
"Invaders From Mars," Natl. Pics

Leon Shamroy
"The Snows of Kilimanjaro," Fox.
"Tonight We Sing," Fox
"Call Me Madame," Fox
"White Witch Doctor," Fox.

William Sickner
"Down Periscope," L. Parsons
"Tangier Incident," L. Parsons
"Timber Wolf," Allied Artists

William Skall
"Everything I Have Is Yours," MGM

(Continued on Page 43)

LIGHTING, composition and camera movement are the three main elements the cinematographer employs to give a film the utmost in production value. Of these, lighting is perhaps the most important single factor. Here skillful lighting of a group points up the mood of the story.

COMPOSITION is simply putting dramatic emphasis of a scene in its proper place. Here cameraman and director check composition of a closeup by means of the camera finder.

The Contribution Of Photography To 'Production Value'

By HERB A. LIGHTMAN

CAMERA MOVEMENT, properly motivated, adds a fluent quality to a production, and makes possible production economies by compressing several takes into one continuous take.

THE TERM "production value" conveys certain connotations of lavishness which motion picture critics like to translate into superlatives such as "gigantic," "colossal," and "stupendous." Reviewers for film trade papers consistently speak of this picture or that as having great production value. What they usually mean when they speak thus of a film is that the settings, costumes, crowds of extras, and star-studded cast look as if they cost a lot of money.

Actually, the expression is somewhat more elusive to define than this example would indicate—for it represents an overall impression of quality conveyed by a sum total of the elements that go into production. This impression does not necessarily depend upon how much money was spent on the picture; in fact, the effect is all too often exactly the opposite.

When one stops to reflect that American audiences go to the movies to gain a stimulating, if vicarious, emotional experience, it should be evident what elements are most effective in gaining approval for a specific film. These elements include a good story, strong direction, and effective camera work—but they do not necessarily include spectacular settings, extravagant wardrobe, or the inevitable "cast of thousands." Rather, an overabundance of such factors serves only to clutter the film and prevent its impact from registering fully upon the audience.

Audiences have a right to expect their films to be well-mounted. Yet there is no need to make the mounting of the film an end in itself, for in the final analysis, the trimmings of a picture should serve to enhance the story and keep the continuity moving ever forward.

(Continued on Page 41)

EASTMAN

PROFESSIONAL MOTION PICTURE FILMS

W. J. GERMAN, Inc.

Fort Lee Chicago Hollywood

WHEN ANN SHERIDAN presented "Oscar" to Arthur Miller, ASC, for the photography of "Anne And The King Of Siam," (best black-and-white photography, 1946) it marked the third Academy Award for Miller for cinematography.

45 Years In Cinematography

Three-time "Oscar" winner Arthur Miller recalls some of the significant developments that influenced cinematography.

By HILDA BLACK

"ARTHUR MILLER, one of the industry's veteran cinematographers, has brought high honor to the profession of which he is a part. Entering motion pictures in 1908, Miller has for forty-five years contributed much toward making the film industry great." With these words, American Society of Cinematographers' president Charles G. Clarke lauded one of the Society's most distinguished members on the occasion of its testimonial dinner last month in his honor.

It was an occasion for reminiscing, too, for Arthur Miller had come into the industry in its formative years and had worked with and had even trained many of the cinematographers who had gathered to pay him tribute.

The story of the motion picture industry from the cinematographer's viewpoint, as traced by Arthur Miller, is rich, colorful, sometimes amusing, and nearly always incredible. With Miller, the story begins in 1908 when he went to work for the Crescent Film Company in Brooklyn—a firm which later became known as the New York Motion Picture Company and which was one of the original "independents."

(Continued on Page 31)

THE PATHE was the standard camera of the "industry" back when Arthur Miller (extreme left) began his career as a cinematographer. Second cameraman Geo. Blizard stands behind another Pathe in center. Photo was made while company was shooting a western back in 1919.

THE BELL & HOWELL camera became the favorite during the 20's. Here Miller is shooting a closeup of Richard Barthelmess posed behind a hastily contrived prop gate, while director George Fitzmaurice watches the proceedings.

ARTHUR MILLER filmed most of Shirley Temple's pictures while she was a child star, using a Mitchell camera which replaced the old reliable but noisy Bell & Howells.

IN A MORE RECENT assignment, Miller lines up a shot with a 20th Century-Fox camera, which company developed when advent of sound demanded a more silent camera. Waiting her turn before the lens is Gene Tierney.

from STIFLING CUBAN HEAT

to FRIGID VERMONT COLD.... *all in one week*

"Hot or cold, it's all the same to my Maurer," says Howard Cagle, well known cinematographer. "From the stifling heat of a Cuban cane field 'burn-off' to a frigid Vermont mountain top one week later — up in the clouds with snow twelve feet deep! Despite the extreme temperatures, my *Maurer* functioned perfectly!"

Top performance under all conditions of light, temperature and humidity — that's what you get with the Maurer "16," choice of the world's top professionals.

THE MAURER 16MM., designed specifically for professional use, equipped with precision high power focusing and view finder. Standard equipment includes 235° dissolving shutter, automatic fade control, view finder, sunshade and filter holder, one 400 foot gear-driven film magazine, a 60-cycle 115-volt synchronous motor, one 8 frame handcrank, power cable and a lightweight carrying case.

Howard Cagle shooting skiing sequence with his Maurer "16," at Bromley, Vt.

J. A. MAURER, inc.

37-01 31st Street Long Island City New York
1107 South Robertson Blvd Los Angeles 35 California

•

Cable Address JAMAURER

16mm maurer

maurer *means finer motion pictures!*

ALL CINE CAMERAISTS respond naturally to the urge to shoot new and scenic vistas, regardless how the footage may be used later. Such footage, when deleted in editing, need not be discarded forever. Save it and file it away for possible future use—by you or some brother cine filmer

Save Those Odd Shots — They're 'Money In The Bank'

Carefully catalogue and file all those odd shots for possible future use; you never know when a discarded shot may save the day by completing a sequence for a new film.

By JOHN FORBES

ALMOST EVERY CINE AMATEUR who edits his films seriously, deletes footage which has no pertinent value to the subject at hand. Especially is this true if the film is a vacation or travel record. All of us, when shooting movies of a vacation trip will make two or more shots of the same subject, using the best shot in the finally edited picture. Then there is the tendency to make random shots of interesting scenes and subjects simply because they appeal especially to your sense of pictorialism at the time.

With some amateurs, such footage is waste material and eventually is discarded. This is not only extravagance, but shows a lack of imagination. For these odd shots invariably can prove of unusual future value. One never knows when he will have need for a scene filmed a year earlier. Only when editing a picture does the need for previously filmed shots occur and then the subject invariably is too remote to warrant a special trip to film it. In such a case, it is rewarding to be able to refer to a reel of odds and ends or stock shots, and find a suitable scene to round out a new continuity.

One of the most valuable departments in a motion picture studio is the library of stock shots. These consist of scenic and atmospheric shots made all over the world, atmospheric long shots made on big sets used in past productions, and an endless variety of cinematic odds and ends — airplanes, fire-engines, fires, ships, boats, city traffic, trains, zeppelins, submarines, explosions, cattle, horses and riders—in fact everything and anything that can be photographed.

When a script calls for an incidental scene of anything of that nature the producer's first thought is to turn to the library and see if there isn't a "stock shot" which can be used for it.

If there is, a great deal of time, trouble and money can be saved by using that shot instead of sending out a camera crew to make the scene specially.

This same expedient can be fully as useful to the amateur as to the professional. In fact, stock shots can sometimes be more useful to the home filmer, since his budget seldom would permit the extra expense of making some incidental scenes unexpectedly necessary for his productions, especially if he had to travel far to get just the one scene.

So one of the best things any amateur can do is to begin to build up a library of stock shots.

Right now is a fine time to start. In most parts of the country spring finds the home filmer with his last season's pictures pretty well cut and titled, while the weather without is scarcely conducive to beginning the new season's campaign.

So why not employ your spare time going through the odd scraps of film left over from the editing of last season's—and the previous season's filming? You are almost sure to find a surprising variety of potentially useful stock shots.

Every time this writer browses through the forgotten footage of past years he manages to unearth scenes the very making of which he has forgotten, but which nevertheless often can be used excellently to fill gaps in more recent efforts.

Next, segregate these odd shots according to subject-matter. Make up one reel (it can begin as a simple laboratory spool) of landscapes; another of rivers; a third of beach scenes; another of boating shots; yet others of trains, planes and so on.

Label each reel with a gummed paper label, preferably protected by a covering of scotch tape, and keep your stock shot reels together, in a handy box or cabinet.

Then when you come to edit your next picture, and find a gap in the continuity which must be plugged, all that is necessary is to reach for the appropri-

(Continued on Page 36)

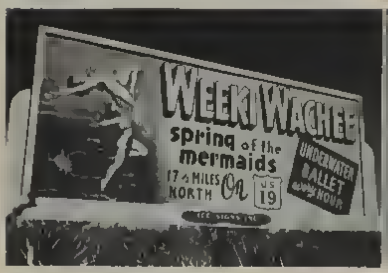
You can bring the brilliance home on Ansco Hypan Film!

Yes, your movies can capture the life-like sparkle and feathery softness of sunlit snow—if your camera is loaded with Ansco Hypan Film!

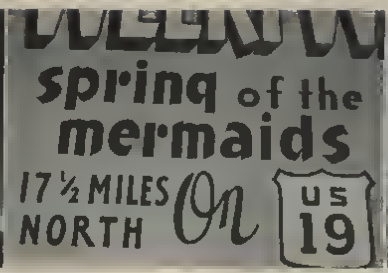
This modern, fine-grain black-and-white film gives you sharper, crisper images of inherently brilliant gradation. Its high emulsion speed (Exposure Indexes—40 daylight, 32 tungsten) lets you use filters in bright sunlight to improve the rendition of skies and shadows.

ANSCO, Binghamton, N. Y. A Division of General Aniline & Film Corporation. *"From Research to Reality"*

Ask for
ANSCO
HYPAN FILM



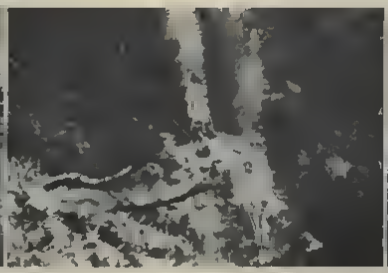
1



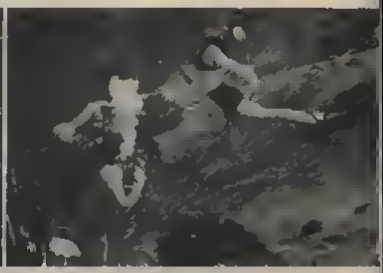
2

3

7



8



9

Plan Your Scenes In Sequence

Before you start to film, think the action through scene by scene. An eye for detail and orderly shooting coupled with a keen sense of values make sequencing easy.

By LEO J HEFFERNAN

INVARIABLY, the framework of the average amateur film consists of a number of sequences which are devised and photographed in such a way that the film can be edited into a homogenous whole. A skillful filmer starts with an idea, often nebulous in his mind, and, throughout the shooting schedule, sticks to the point in his choice of movie material and method of presenting same. The idea eventually becomes a series of well-planned sequences building up to a climax, after which the film is ended as quickly as possible.

Some moviemakers do not fully understand what is meant by the term "sequence." The dictionary offers several definitions and there is just one which fits moviemaking—"A series of things following in a certain order or succession." Thus, a sequence, in film ing parlance, means a series of scenes following in a certain order or succession; but that doesn't tell all of the story, does it? What, exactly, is a *movie* sequence?

Well, a sequence is an integral part without which the movie would not be complete. It consists of a number of scenes that present various aspects of a scene, event, or action; whatever it is that the movie is revealing at that point in the story. It covers just one line in the framework of the movie, but it is divided into a number of shots for the best cinematic effect. Because it is only one small part of the movie, amateur filmers are sometimes careless in planning sequences so that, when it comes time to edit a film, they find that they are without some essential shots.

In shooting photoplays, a script is prepared which breaks the film down into sequences, and the sequences are broken down more specifically into long shots, medium shots, closeups, etc. The whole shooting schedule is written down, or should be, and if the script is well planned, it can be followed blindly, since all of the scenes and effects have been visualized in advance. If there is ample cross-shooting, the film editor should have nothing to complain about when he is called upon to put the film together.

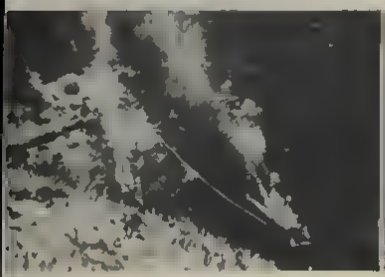
Unfortunately, it is not often that an amateur works from a script even when shooting amateur photoplays, so that it is usually a case of on the spot planning; and this approach always prevails when he is making scenes for a travelogue. It would be impossible to prepare a shooting schedule to cover a place of interest being visited for the first time. How then can a cameraman assure himself of well-integrated sequences in making a travel or vacation film?

Well, let us suppose that the place being visited is Weekiwachee Springs,

4

5

6



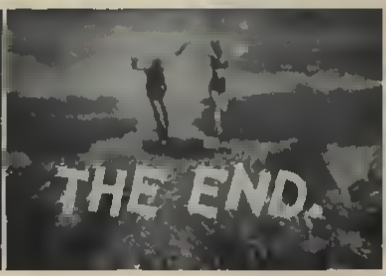
10

11

12

13

14



15

Florida There, not only does the local underwater show provide spectacular material for color cameras, but the management is so camera conscious that lens settings both for diaphragm and distance, as well as film speeds, are announced over the public address system as the show is in progress! A movie-maker is almost certain to come away with excellent footage of the swimming show unless, in the excitement, he forgets to remove the lens cap.

The amateur who approaches this subject without first *planning* his camera attack will probably start with a title, "Underwater Show—Weekiwachee Springs," and then, bang! on will come the spectacular footage without any provocative introduction or build-up. This is not good cinematic form. His screen audience should be made to lick their lips for a time before the climactic scenes appear on the screen. Instead of a starved, single punch sequence, wouldn't it be better to create interest in the underwater show by starting the sequence seventeen miles away from Weekiwachee as described in the pictures and captions on this page

To do this, it is usually necessary to spend more time at a place than does the average tourist because it is advisable to make at least one complete tour of inspection without taking the camera out of its case—or if shots *are* made, they should be of such a nature that they will surely fit into any sequence pattern filmed later Usually, I spend two days in shooting a worthwhile place

(Continued on Page 38)

ABOVE PHOTOS suggest a scene by scene pattern for a home movie documentary of a visit to Weekiwachee Springs, popular Florida resort: 1—Make shot of billboard for your main title

2—A closeup of billboard will increase interest in what is to come 3—Make a daily shot of family car entering resort, or shoot with camera on tripod if second car is unavailable for camera

4—Closeup of sign builds interest 5—Make medium shot showing swimmers putting on swim fins Follow this with shots of visitors entering underwater theatre 6—Start show sequence with shots of swimmers entering water and swimming to formation in middle of lake 7—Include shots of girls made from underwater theatre window

8—Make shots of start of show as swimmers dive through curtain of bubbles. 9—Make shots of ballet numbers 10—Swimmers descend 90 feet to underwater cave 11—Include shots of girls feeding fish underwater. 12—of girl drinking a coke underwater. 13—Be alert for comedy shot possibilities. 14—Include several shots of swimmers maneuvering in water, above and below surface

15—Close picture with shots of swimmers rising to surface, then submerging to curtsy to audience in underwater theatre

ROSTER

American Society Of Cinematographers

JANUARY 1, 1953

RESIDENT MEMBERS

L B. Abbott
David Ahel
Lloyd Ahern
John Alton
Lucien Andriot
Arthur Arling
John Arnold

Lucien Ballard
George Barnes
R O Binger
Joe Biroc
Charles P. Boyle
John W Boyle
Wm W Bradford
Elwood Bredell
Norbert Brodine
Robert Burks

Ellis W. Carter
Walter Castle
Dan Clark
Charles G Clarke
Wilfrid Cline
Russell Collings
Stanley Cortez
Ray Cory
Edward Cronjager
Floyd Crosby

Wm H Daniels
Mark Davis
Robert deGrasse
Clyde DeVinna
George E Diskant
Linwood Dunn
E B DuPar
Elmer Dyer

Paul B. Eagler
Arthur Edeson
A Farciot Edouart

Max Fabian
Daniel L. Fapp
Ray Fernstrom
Frank Finger
George J Folsey, Jr.
Henry Freulich
Karl Freund
John P. Fulton

Lee Garmes
Fred Gately
Maury Gertsman
Alfred L. Gilks
Irving Glassberg
Donald C Glouner
James Gordon
W Howard Greene
Jack Greenhalgh
Loyal Griggs
Burnett Guffey
Carl Guthrie

Ernest Haller
Sol Halprin
Edwin Hammeraas
Ralph Hammeras
Russell Harlan
Sid Hickox
Robert Hoag

Winton Hoch
David S Horsley
James Wong Howe

Allan E Irving

Fred H Jackman, Jr.
Fred W. Jackman
Harry A Jackson
H Gordon Jennings
Ray June

W Wallace Kelley
Benj. H Kline
Lloyd Knechtel
H F. Koenekamp
Milton Krasner

Charles B. Lang, Jr
Joe LaShelle
Ernest Laszlo
Charles C. Lawton, Jr.
Paul K Lerpae
Lionel Lindon
Leo Lippe
Harold Lipstein
Arthur Lloyd
Walter Lundin
Warren E Lynch

Joe MacDonald
Jack MacKenzie
Fred Maodl
J Peverell Marley
Charles A. Marshall
Harold J Marzorati
Rudolph Mate
Ted McCord
Wm C Mellor
Ray Mercer
R L Metty
Arthur Miller
Ernest W. Miller
Virgil Miller
Victor Milner
Hol Mohr
Ira H Morgan
Nick Musuraca

Harry C. Neumann

Roy Overbaugh

Ernest Palmer
Kenneth Peach
Harry Perry
R. W. Pittack
Robert H. Planck
Frank Planer
Sol Polito

Frank Redman
Ray Rennahan
Irving Ries
Irmin Roberts
George H. Robinson
Guy Roe
Len H. Roos
Jackson Rose
Charles Rosher
Harold Rosson
John L. Russell, Jr
Joseph Ruttenberg

Charles Salerno, Jr
John Seitz
Leon Shamroy
Henry Sharp
William A Sickner
Allen Siegler
Wm. V. Skall
Edward Snyder
Wm. E Snyder
Ralph Stauh
Mack Stengler
Clifford Stine
Archie J Stout
Harry Stradling
Walter Strenge
Karl Struss
Robert L Surtees

Philip Tannura
L O Taylor
Ted Tetzlaff
Stuart Thompson
Robert Tobey
Leo Tover
Thomas Tutwiler

James C. Van Trees
Paul C Vogel

Joseph Walker
Gilbert Warrenton
Harold E Wellman
Albert Wetzel
Lester White
Harry Wild
Wm N Williams
Rex Wimpy

ASSOCIATE MEMBERS

Herbert Aller
Simeon Aller
Mark Armistead
Cecil Bardwell
Benj Berg
Edgar Bergen
John Bishop
Louis A Bonn
David Boyle
L M. Combs
J L Courcier
George Crane
Edward P Curtis
Wm A Cushman
Dr. C R Daily
John DuVall
William Eglinton
Ferdinand Eich
Ralph Farnham
Rolla Flora
Fred W Gage
Wm. J. German
George H Gibson
Alan Gundlefinger
Charles Handley
Robert Hansard
Ted Hirsch
Wilton R Holm
Emery Huse
Lloyd A Jones
W F. Kelley
Wilson Leahy
Sidney Lund
Dr. C. E. K Mees

Lewis L. Mellor
Garland C Misener
Peter Mole
Hollis Moyse
O W Murray
Capt. Don Norwood
Norman F. Oakley
Val E Oshorne
Emil Oster
Dr Konstantin Pestrecov
Harry E Pratt
H W Remerscheid
Robert Riley
Luren Ryder
Peter L. Shamray
Sidney P. Solow
John J Swain
Randall Terraneau
Albert Tondreau
Wm J Wade
Robert Young

NON-RESIDENT MEMBERS

Charles E Bell—St Paul, Minnesota
O H Borradaile—Canada
Joseph Brun—Forest Hills, New York
Jack Cardiff—England
S C Chuck—Formosa
Olle Comstedt—New York
J Burgi Contner—New Canaan, Conn
John Dored—Halden, Norway
Max B DuPont—Tahiti
Higino J Fallorina—Quezon City, P. I
Frank R Follette—Sparta, New Jersey
Charles Harten—New York, N. Y.
Reed N Haythorne—Tucson, Arizona
Charles W Herbert—Tucson, Arizona
John L Herrman—New Orleans, La
Gerald Hirschfeld—Port Wash, N Y.
Eric Horvitch—South Africa
Wm H Jansen—Manila, P. I
Don Malkames—Tuckahoe, N Y.
Ricardo Marcelino—Manila, P I
Louis Page—France
Ted Pahle—Spain
J F Painter—N Y
Paul Perry—California
Bob Roberts—California
Robert Sable—Chicago, Ill
James Secley—Penna.
William Steiner, Jr—New Jersey
Nicholas Toporkoff—France
Frederick A. Young—England
Frank C Zucker—New York, N Y

INACTIVE MEMBERS

Russell Cully
Faxon Dean
Jos. A Dubray
Harry Hallenberger
G Floyd Jackman
Glenn Kershner
Gordon B Pollock
George Schneiderman
Douglas Shearer
Jack Smith

HONORARY MEMBERS

E. O Blackbura
A S. Howell
David MacDonald
G. A Mitchell

45 YEARS IN CINEMATOGRAPHY

(Continued from Page 24)

The space rented by Crescent Film Company was its studio in the daytime, but became a beer garden at night In view of today's mammoth studios, this may sound ludicrous but it was not unusual for that era. This was before the advent of artificial lighting, and all shooting had to be done by natural light

'The cameramen were the real filmmakers,' says Miller. "In fact, the movie *was* the cameraman in those days Not only did we do the actual shooting we also were our own laboratory technicians From beginning to end what appeared on the screen was the sole responsibility of the cameraman

"When we didn't know a bit of business, we had to figure it out for ourselves We had no historical backlog from which to draw. We learned by experimenting No rules had been set up and every cameraman was strictly on his own.

"I, for one asked lots of questions in those days When I saw any unusual effect that another cameraman had achieved I looked him up and asked him how he got it. Tony Gaudio and Billy Bitzer who was D. W. Griffith's great cameraman, and many, many others contributed to my fund of knowledge by answering questions for me. All I've ever learned about this business has been learned in that way—or through my own experiences"

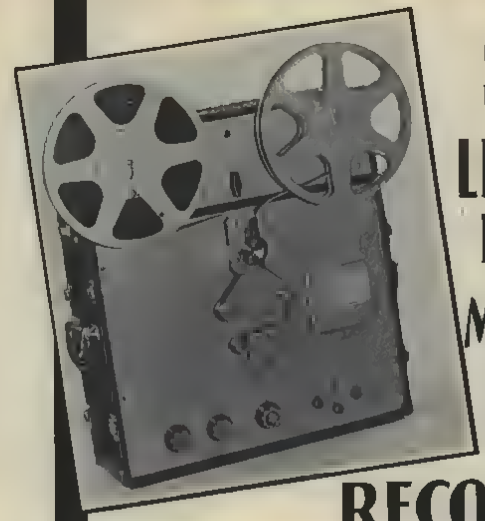
In those early days of picture-making the laboratory was the most important part of any studio set-up, said Miller. The studio, as such, was secondary Much of the picture was made outdoors, on location, and shooting devices were simple

"You set your camera," Miller reminisces, "you screwed it down to the floor in whatever position you wanted it—and that was that. There was no moving about, no dolly shots, no striving for this or that angle as in today's pictures

"Sets were unbelievably simple Only the things actually handled by the actor were real—all else was painted in. There was a standard format for the set: always a door at the rear toward which the actor eventually walked, thus giving the camera a full figure shot of him In addition to that one full view, there were two types of foreground shots· One was called French foreground, which cut the actor mid-calf; the other, American foreground, which cut him at the knees. We didn't use closeups at all"

However, a closeup had previously been used in "The Great Train Rob-

HALLEN'S



1953 MODEL

LIP-SYNC 16mm Magnetic FILM RECORDER

Model 25B $1495.00

IMMEDIATE DELIVERY

- The HALLEN model "25B" 16mm magnetic film recorder assures you of 35mm studio quality at 16mm film speed. Frequency response: 30 — 10,000 cps
- One case portable unit Removable power supply and playback speaker included.
- Three inputs for simultaneous use Two microphones and one bridging input for music or background effects.
- Track placement is set for 16mm strip coated film or full coated single perforated magnetic film Will never become obsolete.
- High speed forward and rewind. Seperate motors.

WRITE FOR FREE LITERATURE AND PRICE SCHEDULE

Since 1948

hallen CORPORATION

3503 WEST OLIVE · BURBANK, CALIF.

CABLE ADDRESS "HALLEN" · CHARLESTON 8-6976

PRODUCTION EQUIPMENT

ARRIFLEX 35mm CAMERA
SALES REPAIRS
Latest model II reflex motion picture camera, magazines, tripod, telephoto lenses, battery units, all accessories available for immediate delivery.
CAMART BLIMP AND SYNC MOTOR for the ARRIFLEX camera

HALLEN
SENSATIONAL NEW RECORDER
Series 25B magnetic film recorder for 16mm sprocket driven film Hi-fidelity response, three channel mixing amplifier, complete in a single case Demonstrated at our showroom
$1,495 00 FOB Calif

COLORTRAN LIGHTING EQUIPMENT
Hi-intensity studio type lighting is now possible on low amperage circuits All units available from 750 watt spots to 5000 watt floods Grip kits for good lighting control Balanced for 3200 to 3400 degrees Kelvin color temperature
HOLLYWOOD STUDIOS USE COLORTRAN EQUIPMENT ON LOCATION
GET COLOR RIGHT — WITH COLORTRAN LIGHT

PRODUCTION EQUIPMENT
BELL & HOWELL Automatic 35mm film splicing machines, laboratory model, used . . . $795 00
ACE 35mm Rotary film viewer with counter, like new . . . $195 00
AURICON SUPER-1200 single system camera, two 1200' magazines, model S galvo and matching amplifier, all sound accessories, tripod, NEW Ready for Delivery
AURICON CM-71 Pro camera, amplifier, all sound accessories, used $1,195 00
CINE-VOICE Camera, amplifier, all sound accessories, like new $525 00
CECO Blimp, sync motor, and viewfinder for Cine-Special camera excellent $695 00
CECO three wheel dolly $175 00
EYEMO Q Camera, 2-400' magazines, 3 lenses, motor, tripod $1,450 00
ARRIFLEX 35mm, model II, 3 Astro lenses 2-200' mags, case $995 00
MAURER model D recorder, sync motor, 400' mag, less galvo and amplifier Ideal for conversion to magnetic film recorder $595 00
HALLEN B-22 magnetic 17 5mm recorder, three channel mixer, two case demonstrator unit, special $1,450 00
CAMART 17 5mm magnetic film recorder, three channel mixer, custom-built to exceptionally high specifications specially offered at $1,595 00
BOOOE background projector for 4"x 5" slides, stand, variac transformer, 9'x12' background process screen and frame NEW Ideal for television or film studios Why build sets when you can project them? Price $1,350 00

BUY — SELL — TRADE 16-35MM EQUIPMENT
Convert your idle equipment into CASH

THE CAMERA MART, INC.
1845 Broadway, near 60th Street
New York 23, N.Y. Circle 6-0930
Cable Address: Cameramart

bery" It showed a bandit from the waist up, brandishing two guns, in anticipation it would seem of the much later William S Hart westerns.

"Don't think the Western films have come into popularity only in the past few years," says Miller. "They have been in vogue almost as long as the picture industry The New York Motion Picture Company made a one-reeler with James Youngdeer, an Indian who later became one of the early movie stars Eventually he came to Hollywood and directed pictures for Pathe."

Locations were simple, too "We travelled everywhere on busses, and all the cameraman's equipment went along —the actors helping to carry it," says Miller. "In those days actors recruited from the legitimate stage felt the new industry beneath their dignity, and therefore disguised themselves when appearing in a movie by wearing some kind of beard, wig, or the like"

"In the early days of movies, the cameraman invested everything he earned in his work and equipment; he bought his own camera, lenses and accessories We all had our own particular little bundle of tricks, too, and frequently what made one fellow a better cameraman than another was his private collection of lenses. This was before studios had their own departments for making special effects; lap dissolves, fades, visions, etc, were made right in the camera as the picture was shot"

To protect their pictures from piracy by outlaw film companies, early-day producers created emblems which became a sort of trademark for their product. These were hung prominently on the walls of every set and thus became a pictorial part of every scene Thus if any part of the picture was pirated by an outlaw company, the trademark visible on the screen revealed the fraud. Later the visible trademarks were abolished in favor of imprinting the company's name along the edge of the film when prints were made.

One of the most restricting elements in early day film production was the lack of a practical artificial light source for photography. When this obstacle was hurdled, a new era dawned for movies.

"The first such lighting that I remember," says Miller, "was Ed Porter's experiments with an arc light that had been taken from a New York street lamp-post This was mounted in a suitable box and a sheet of bright tin placed at the back for a reflector The results were highly satisfactory Within a very short time the use of arc lights to augment daylight became general practice among film makers, and this marked one of the first really important improvements in motion picture photography

"Not long afterward, another cameraman observing a bright lighting unit then generally used in postoffices, secured one of them for experiment on a motion picture set. Multiple rows of slender tubes gave off a soft, bluish light which was found ideal for motion picture photography, and thus began the use of the now famous Cooper-Hewitt lamps as a lighting source for cinematography.

"With indoor lighting for motion pictures rapidly gaining popularity, other firms developed equipment especially for studio use. One of these was the Wohl Company, on Fulton Street in Brooklyn, which introduced the Wohl Twin Arcs. Thereafter, other manufacturers developed lighting equipment for the studios. A man named Kleig introduced the now famous "Kleig Lights"— a name that was applied to movie lamps in general for a great many years afterward.

"Following the Kleigs, the Sperry Company introduced the sun arc searchlights. Up until that time we had used only the blue end of the spectrum of our film. Shortly afterward, panchromatic film was introduced, and this plus incandescent lighting now enabled us to utilize the red end of the spectrum, thereby widening the scope of pictorial possibilities in motion picture photography. Thus began the era of incandescent lighting in motion pictures."

Miller recalls that one of the first productions to utilize incandescent lighting exclusively was a two-reeler starring William Collier, Sr., and Mae Busch. It was photographed by Fred Jackman, ASC, for Mack Sennett. That was in 1919. Sennett, the Keystone Komedy king,

(ADV)

"Girls seemed to avoid me until I got my KINEVOX*"

(*Leading portable synchronous magnetic recorder)

and one of the most important producers at that time, is credited with building the first enclosed studio

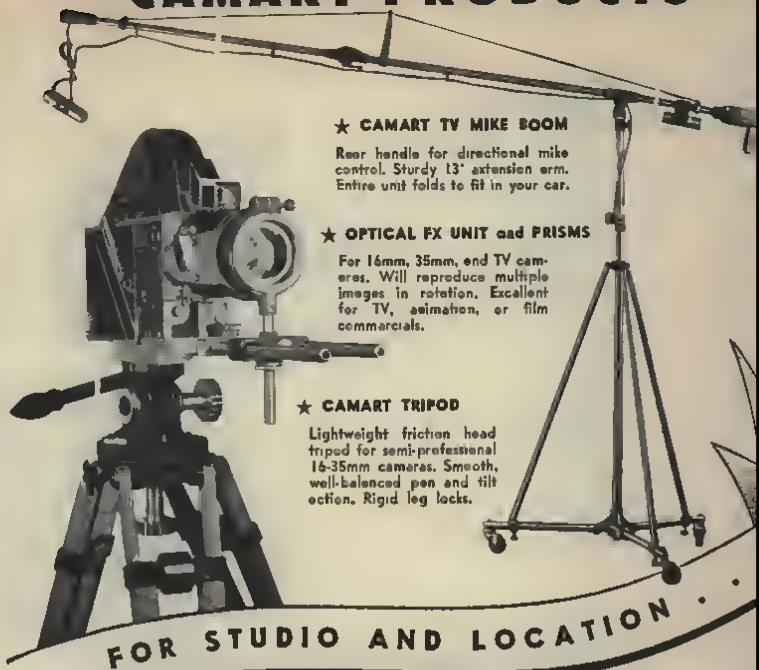
The first feature production to be photographed entirely with incandescent lighting, Miller recalls, was "Rose of the Rancho," which Lee Garmes, ASC, photographed for First National Studios, about 1924 "Garmes was one of the greatest boosters for incandescent lighting in the business," says Miller

In the early days of movie making, all cameras were cranked by hand. One of the first things a cameraman had to learn was how fast to turn the camera and to turn it at an even pace. If the pace varied, the action of the players would vary, turning the camera too slow would make them appear walking rapidly if not jerkily on the screen To point up how cameramen generally were troubled by this, Miller tells an interesting story about Fred Jackman in his search for the answer to correct cranking speed.

Jackman had asked Earl Hines, another old timer, how he timed his cranking He was told to hold his cranking evenly to sixteen frames per second, and to count seconds by saying "One thousand and one, one thousand and two, etc," as he cranked Skeptical of this advice, Jackman decided to investigate for himself He reasoned that if he could find out at what speed projectionists cranked their machines, he'd have the right answer So he spent a couple of hours one afternoon in the gallery of a local movie house sitting close to the projection booth where he could watch the projectionist through the open door As the projectionist cranked, Fred moved his arm, cranking an imaginary camera in unison When he thought he had the tempo right, he left the theatre and prepared to crank his camera accordingly on his next picture What he didn't know, of course, was that projectors were cranked slower than motion picture cameras.

His next assignment ironically enough was on a Harold Lloyd comedy, and the ultra rapid motion which Jackman's slow cranking gave to Lloyd on the screen, is credited with establishing Lloyd as a new screen comedian. It was the first time that anyone had discovered that comedies could be made funnier when photographed at a lower rate of speed than dramatic pictures. Speeding up action on the screen made the antics of comedians funnier Projectors in those days were so made that one foot of film travelled past the gate with each turn of the crank, while the film in cameras travelled at half that speed Dramatic films continued to be cranked at 16 frames per second (until the advent of sound), but comedies were upsually cranked at 12 frames per second

CAMART PRODUCTS



★ CAMART TV MIKE BOOM

Rear handle for directional mike control. Sturdy 13' extension arm. Entire unit folds to fit in your car.

★ OPTICAL FX UNIT and PRISMS

For 16mm, 35mm, and TV cameras. Will reproduce multiple images in rotation. Excellent for TV, animation, or film commercials.

★ CAMART TRIPOD

Lightweight friction head triped for semi-professional 16-35mm cameras. Smooth, well-balanced pan and tilt action. Rigid leg locks.

. . . FOR STUDIO AND LOCATION . . .

★ CAMART BLIMP for ARRIFLEX 35mm CAMERA

Geared follow focus control. Reflex viewing through the blimp eliminates parallax problem. 110 volt 60 cycle siegle phase sync motor. Geared footage counter. Accepts cameras with 400' magazines.

★ CAMART BABY DOLL

New advanced glide steering. Platform for assistant and accessories Adjustable swivel seat. Rigid clamps for triped legs For triped, babytriped, and hi-hats. Size 35 x 4 inches, it comas apart.

★ CAMART CAMERA DOLLY

Professional motion picture or TV camera dolly Two seats for operator and assistant. Geared lift for smooth operation of boom arm from 26" to seven feet. 30" width will go through standard door. Weight 350 pounds. Easily transported

Above equipment available for immediate delivery

Write for Details

SALES • RENTALS • REPAIRS

THE CAMERA • MART INC.

MOTION PICTURE AND TV PRODUCTION EQUIPMENT

1845 BROADWAY
NEW YORK 23, N. Y.

Phone: Circle 6-0930
Cable Address: CAMERAMART

left: On set with Arch Oboler while filming "The Twonky"

ARCH OBOLER RECORDS WITH S-5

"Stancil-Hoffman's S-5 Synchronous Magnetic Film Recorder gives me better quality sound at lower cost than any other system I've used," says Mr. Arch Oboler. Mr. Oboler's "Bwana Devil," 1st major three dimensional motion picture, utilized Stancil-Hoffman recording equipment exclusively.

HOW YOU SAVE WITH THE S-5 RECORDER:

1. Lower investment cost—complete recording system now within your budget.
2. Versatile—single/three phase, battery operation, 17 5/35 and 16 MM; in carrying cases or for rack mounting.
3. Functional design and precise engineering reduces operating costs and maintenance.
4. Positive synchronization edit foot by foot at sprocket hole by sprocket hole, interlocked push button controls.

write for further information to:

921 N. Highland
Hollywood 38, California

STANCIL-HOFFMAN
New York · Chicago · Toronto · Honolulu

Hillside 7461
Cable Address: STANHOFF

COMPLETE RECORDING SYSTEMS FROM MICROPHONE TO RELEASE PRINT

Not Next Year, But NOW! Why Wait 'Til 1954

Sound & Picture Editing ACMIOLAS

WORLD FAMOUS OVER 20 YEARS

Order yours now for 3 month shipment

- Straight up and down threading . . . nothing new to learn
- All the familiar features, PLUS
- Oversized 24-tooth sound sprocket
- Exciter lamp instantly changed and focussed
- All belts V mounted, smooth running
- Barrel type shutter gives clean cut-off
- Projection lamp changed quickly, easily
- Clear, crisp sound, plenty of volume
- External tension adjustments on motor drives
- Built to out last 3 ordinary machines

Send for Illustrated Acmiola Brochure

MODEL C—(one of 21 different types) 35mm Sound and Picture ACMIOLA. 6" x 8½" shadow box screen, or larger image if desired

ACMIOLA DISTRIBUTING CO.

Division of S. O. S. CINEMA SUPPLY CORP.

Dept. F, 602 W. 52nd St., New York 19—Cable: SOSOUND

Always remember this . . .

. . . if you are an advertiser with equipment or services to sell the motion picture industry:

AMERICAN CINEMATOGRAPHER reaches every motion picture production center throughout the world.

Cranks eventually went out and when motors were adopted in 1919, Jackman, who was becoming recognized for his unusual special effects, photographed one of the first scenes with the innovation. It was for an air sequence and the camera was fastened to the nose of the plane and operated from switches inside the plane. Motorized cameras were to bring vast changes in photography.

But in Arthur Miller's opinion, the biggest single development in film-making perhaps was the introduction of the cut-back, a technique which involved cutting from one actor to another and then back again. This was introduced around 1911 and is credited to D. W. Griffith. It changed the entire construction of pictures, both in the photography and the editing.

"It introduced a vital personal element into pictures," says Miller, "which formerly they had lacked. It made for warmth and for the first time gave the spectator a feeling of being a part of the scene. It was an unseen element but vitally real. I believe it did more for furthering the progress of motion pictures than any other single factor and, until sound came, was the most progressive step yet made in film production technique.

Still another important accomplishment was the elimination of static in the camera, which was responsible for ruining a lot of film in the old days. Created by the friction of moving parts in the camera, static changed with the weather and was just as unpredictable. A cameraman never knew when he was getting it on his film—only after the film was developed and the tell-tale lightning flashes appeared on his negative. Although many devices were improvised to eliminate static, the trouble was not finally overcome until the introduction by Eastman Kodak Company of X-back coating on motion picture film.

"When sound was added and thus made "talkies" of movies, cinematography suffered a temporary setback. Noise from the camera was picked up along with the dialogue, necessitating the use of large sound-proof booths to house the camera and crew. The booths were not generally mobile and thus the flexibility of the camera was immobilized for a time, but later restored with the introduction of the camera blimp.

"Housed in a sound-proof blimp, which was invented by sound engineer Charles McClay (his son, Howard McClay, is presently motion picture editor of the Los Angeles Daily News) the camera could again be used on the sound stage with all the freedom of the silent picture days. The first blimps were manufactured by McClay in his own plant, and were first introduced at the old Vitagraph studio. McClay later went

to Warner Brothers where he was employed for many years.

"There are so many improvements in motion pictures, so many things that today seem matter-of-fact that would have astounded us thirty or forty years ago," remarks Miller. "This certainly is a remarkable industry we're in."

One of the most remarkable things, according to Miller's fellow-craftsmen, is that there are men like him to give of his time, energies, and talents to furthering the cameramen's best interests. For today, Miller's main activities center around the Cameramen's Local Union in Hollywood, to which he donates his services

As a member of the group of early-day cameramen who helped form the Cinema Camera Club in New York City and later joined the west coast group known as the Static Club, it was natural that Miller should become an active member in The American Society of Cinematographers when the two groups merged in 1919

It was richly deserved recognition when, at its December meeting in Hollywood, the American Society of Cinematographers paid formal tribute to their fellow-craftsman by honoring him with a plaque—a citation of merit—"in commemoration of his long and brilliant career as a cinematographer and as a leader in his profession."

This was not the first honor bestowed upon Miller, however. For, during his successful career, he has won prestige and acclaim as result of his brilliant photography of films from "The Perils of Pauline" to his most recent pictures During his years in the motion picture industry he has been honored with seven Academy Award nominations and has received three Academy Awards for black-and-white photography. The Academy "Oscars" for outstanding cinematography of "How Green Was My Valley," "The Song of Bernadette," and "Anna and the King of Siam" stand proudly on the mantlepiece in Miller's den

In forty-five years the motion picture industry has outgrown its early crudities and fumbling awkwardness; it has attained important stature as the world's major entertainment medium Arthur Miller has been a vital cog in the wheel of this expanding phenomenon Miller, as did other illustrious cameramen such as Fred Jackman Arthur Edeson, Philip Tannura, John Arnold, Charles Rosher, and John Boyle, literally grew up with motion pictures. And the fact that the old "flickers" evolved into such an imposing, creative, and entertaining giant can, in large measure, be credited to the resourcefulness and ingenuity of these early-day pioneer lens artists. END

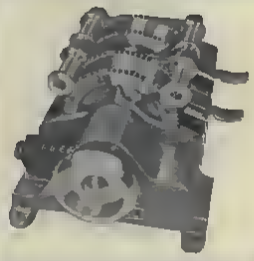
For Instant Movability and Advanced Design

"HYDROLLY"

(TV or CAMERA DOLLY)

Hydraulic lift type for fast upward and downward motion of TV and Motion Picture cameras. Lightweight — sturdy — easily transported in a station wagon. Fits through a 28" door. Adjustable leveling head. In-line wheels for track use. Steering wheel and floor locks.

PRECISION-ACCURATE "SYNCHRONIZER"



16mm or 35mm

IMMEDIATE DELIVERY!

Any combination of sprockets assembled to your specifications. Sturdy cast aluminum construction. Foot linear type, with frame divisions engraved on sprockets. Contact rollers adjusted individually for positive film contact. Fast finger-tip roller release. sprocket shaft slip lock, complete with footage counter.

VARIABLE SPEED MOTOR with TACHOMETER

for Cine Special or Maurer Cameras

115 V. Universal Motor—AC-DC
Variable Speed 8 - 64 Frames
Separate Base for Cine Special
Adapter for Maurer Camera

INTERCHANGEABLE MOTORS:

12 Volt DC variable Speed 8-64 Frames.
115 Volt AC 60 Cycle, Synchronous Motor, Single Phase

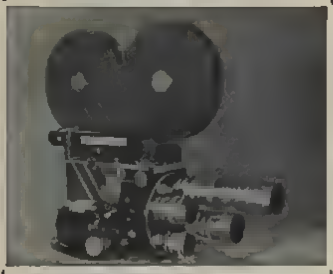
Animation Motors Cine Special, Maurer, B & H, Mitchell Motors for Bolex and Filmo Cameras Time Lapse Equipment

- Lens Coating • "T" Stop Calibration
- Designing and Manufacturing lens mountings and camera equipment for 16mm and 35mm cameras.
- Bausch & Lomb "Baltar" Lenses and others for Motion Picture and TV Cameras.
- Rentals — Sales — Repairs: Mitchell, Eyema, Bell & Howell, Wall, Cine Special Cameras.

Write for information and prices

NATIONAL CINE EQUIPMENT, Inc. 209 WEST 48th ST. NEW YORK 19, N. Y.

MORE CONVENIENCE with LESS EFFORT



PAR 400' Magazine for Cine Special

Consider the convenience of having 400 feet of film available for instant use, as well as the savings of time and effort formerly devoted to changing 100 foot film chambers, and you can readily see why the PAR 400-foot magazine is a "must" for your Cine Special

The PAR 400-foot magazine is operated by the camera spring motor with a PAR spring take-up, or by an electric motor drive It is reversible for backwinding, features a footage counter, and permits normal use of the 100-foot film chamber Both daylight loading spools and film on cores of any size up to 400 feet can be used The entire magazine is quickly and easily removed, and can be used with the PAR Reflex Finder Magnifier

Write for prices and complete information on equipping your Cine Special with a PAR 400-foot magazine

PAR PRODUCTS CORP.
926 N. Citrus Ave. Hollywood 38, Calif.

KELLY CINE CALCULATOR
A Sliderule Disc Computer
Eliminates Bulky Manuals

15 USEFUL SCALES

- ★ Film per second
- ★ Filters and Factors
- ★ Aperture Scale
- ★ Depth of Focus
- ★ Hyperfocal Distance
- ★ Field of View
- ★ Camera Speeds

Instruction Manual Included

$3.95

Write to add your order

FLORMAN & BABB
70 WEST 45TH ST., NEW YORK 36, N.Y.

ATTENTION
FASTEX AND HIGH-SPEED CAMERA NEGATIVE PROCESSORS
Increase film speed up to three (3) f stops where illumination is limited, with L & W F-lm Speed Increaser—2 ozs. $2.00
L&W TECHNICAL PHOTOGRAPHIC ADVISORY SERVICE
5619 Merkle Ave. Parma 29, Ohio

Automatic Daylight Developing Tank

- Processes up to 200 Ft.
- 8mm 16mm-35mm
- Movie—X-Ray—MicroSlm
- Motor Drive—Portable
- Tough plastic tanks
- Uniform Density Assured
- 70mm tank also available
- Guaranteed

Write for Free Literature Dept. C
Micro Record Corp. 225 West 28 St New York 1 N.Y.

SAVE THOSE ODD SHOTS

(Continued from Page 26)

ate stock shot reel, run it and select a shot that will serve your purpose.

The matter of keeping these stock reels "alive" and whenever possible adding to them is, of course, of the highest importance. If you once become conscious of the value of your stock shot library, however, it will not be difficult.

All of us encounter dozens of shots when out a-filming—shots interesting in themselves, but not of value to whatever we may have in hand at the mo ment. Sometimes we can't resist shooting them, anyway; sometimes older and more hardened filmers can resolutely steel themselves to pass them by

But if we are content to shoot them, enjoy their merits, and then let them stand in the stock-shot reels, waiting their chance to be useful in a picture, sooner or later they will come in handy, while meanwhile the library grows usefully.

In the same way, it can be highly advantageous, when vacationing, to keep one's eyes—and lens—open for potentially useful stock scenes Getting such useful shots on film need not take much of either time or film.

It will not be a noticeable drain on even a slim vacation budget But the possession of such shots can often save a great deal of time and money when some later picture is being assembled

This stock-shot idea, valuable as it is to an individual, can be even more valuable if carried out as part of an amateur movie club's cooperative program Many clubs have libraries of magazines, quite a few have libraries of completed films A good library of stock shots could be of immense additional value to the members

Practically every club member could find among his own film discards scenes which could be contributed to such a club stock shot file He could also contribute further stock shot footage from odd footage filmed on vacations and business trips.

And if you will consider for a moment the spread of territory and interests covered by the vacations of the members of your own club, you can visualize the range and scope of a club stock shot collection if even a majority of the members get behind the idea.

One club member may spend his vacation going to Detroit to get a new car; another may go to a convention in New York, a third may go fishing in Canada, a fourth may tour Europe while a fifth visits California, Mexico or Alaska.

If each of these cine clubbers makes but one stock-shot on each roll of film he exposes, the club will at the end of the season have an unrivaled variety of shots which can be of use to many of the other members.

Perhaps the filmer who went to Europe forgot he needed shots of New York; the conventioneer's spare footage can provide it Perhaps the man who went to Detroit needs a shot of a train to introduce the start of his trip; the shots of some other member can supply it And so it goes, growing as the library and the enthusiasm behind it grow.

As a matter of practical club policy, however, it would seem wise to throw some safeguard around the project, so that those non-contributing members who as a rule are always with us, cannot draw upon the collection to which they have contributed nothing. At first thought, a small cash fee from such non contributors would seem to cover this situation.

But this would reduce the library without adding any footage to replace what is drawn. It would seem wiser, therefore, to make the stock shot library open only to members who have contributed film—and usable film—and further to make participation possible only in proportion to the member's past contributions

A member who had in the past contributed four good scenes might, therefore, be allowed to take three shots out. If he at the same time brought in further usable shots for the library, he would be entitled to take out additional footage It seems only good sense to insist that the individual contribute more than he takes, especially during the building-up of such a scheme, for otherwise the library footage—and the

AMATEUR MOVIE MAKERS!

Swap Your Odd Shots

with other readers of American Cinematographer

★

Need some special footage in 8mm or 16mm, color or black-and-white? Got odd footage you'd like to swap? Want to shoot a special local scene or subject for another cine amateur?

Then tell them about it in the

STOCK SHOT COLUMN

to appear soon in

AMERICAN CINEMATOGRAPHER

★

More details elsewhere on this page

benefits therefrom—would shrink instead of grow.

In any event, this idea of building a stock-shot library, whether put into practice individually or collectively, can become one of the most practical of aids to building better films.

Of course, even with one's personal stock shot file or that of his cine club, there will invariably arise need for footage not to be found among these stock shots. The needed shot, however, may be available in the stock shot file of some distant amateur filmer or perhaps arrangements can be made with such a filmer to shoot the footage for you.

With this thought in mind, American Cinematographer this month inaugurates a new service for its amateur movie readers—that of a Stock Shot column. Here readers may make known their needs in the way of a special scene or footage. Also, readers with such footage to sell or exchange may list their footage in this column.

The initial column is scheduled to appear in our March issue—providing, of course, sufficient listings have been received by our February 10th deadline. The column is not open to professional film makers.

To enable us to properly present needs or wants in stock shot footage be sure to give these facts:

1—Size of film—whether 8mm or 16mm
2—Color or black-and white
3—Length (approximate)
4—Brief description of each scene wanted or offered
5—Your name and address.

Mail this information to The Editor, American Cinematographer, 1782 North Orange Drive. Hollywood 28, Calif. Deadline for material is 10th of month preceding issue.

REMOTE CONTROL FOR MITCHELL CAMERA

(Continued from Page 18)

by being ganged to the second potentiometer slider simultaneously as it delivers the proper geared torque to the camera mechanism.

The potentiometers which proved adaptable to this problem are those of the ten turn helical type having extreme sensitivity. In the hand control the dial is identical with that on the camera, and the gearing within the hand control and motor unit result in a ratio of 3 turns of control knob to approximately 330 degrees at the lens.

Modification of the camera in this installation was localized at the lens knob on the side of the camera opposite to the finder (Fig 4). A dovetail bracket with locking lever is mounted perma-

F&B NEW & USED EQUIPMENT FOR MOTION PICTURE & TV FILM PRODUCTION F&B

EXTREME WIDE ANGLE ANGENIEUX RETROFOCUS LENS
9.5mm f2.2 in 16mm "C" mount
★ Extreme wide angle of view
★ Fabulous depth of field
★ Beautiful exaggarated perspective
★ Absolutely color corrected
★ Anti reflection coated
★ Excellent resolution and contrast
★ Excellent field coverage
★ Completely free of distortion
FITS ALL 16mm "C" MOUNT CAMERAS AVAILABLE IMMEDIATELY

FREZZOLITE
High-powered portable spot/flood light with 32v powar supply and builtin battery charger Bracket attaches light to any movie camara Used by leading TV stations and newsreels Excellant for daylight "fill" or "booster" aliminates unwaldy reflectors and heavy lights Waight totals only 20 lbs furnished with carrying case and shoulder strap
AVAILABLE IMMEDIATELY PRICE $210 00

NEW F&B HEAVY DUTY TRIPOD
A new friction head with super smooth action Solid mahogany legs, telescoping, adjustable pan handle Positiva locks and tension adjustment
Excellent for all 35mm and 16mm cameras
IMMEDIATE DELIVERY PRICE $275 00

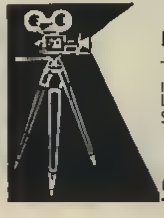
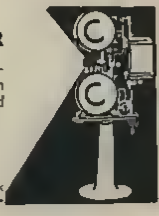
F&B PORTABLE MIKE BOOM
Folding mike boom extends to 16 feet Braced and strutted, will support any weight mike Sturdy 3-wheeled folding stand, rotating mike controls from rear Total weight 45 lbs All parts chroma plated
FITS IN YOUR CAR PRICE $265 00

F&B EQUIPMENT RENTALS
CAMERAS 35mm and 16mm
Mitchell, Maurer, Auricon, Bell & Howell, Cine Specials, Filmo, Arriflex
MOVIOLAS 35mm and 16mm
Sound readers, synchronizers, hot splicers, sync recorders and projectors, meters, tripods, dollies, blimps, mika booms, Bardwell-McAllister lights and cables, Zoom lenses, magazines, accassories
WRITE FOR RENTAL PRICE LIST

USED EQUIPMENT BARGAINS
DEBRIE K metal, lens, motor, mags $175 00
EYEMO 71 A, 47mm f2.5 Cooke lens 195 00
EYEMO 71 N, 3 lens spider turret, prismatic critical focuser drum view finder 7 speeds, 2" f2.8 Eymax, excellant 695 00
EYEMO 71 Q 3 lens spider turret, prism focuser pos obj viewfinder, 6 speeds has minor damage on body does not affect camera operation or picture
SPECIALLY REDUCED TO ONLY 595 00
EYEMO 400-foot magazines, metal 49 50
EYEMO motors 12v AC/DC 8 to 48 fps 87 50
COMPLETE STOCK OF EYEMO PARTS GUARANTEED EYEMO REPAIRS AND OVERHAUL SERVICE
CINE SPECIAL, black, 1" f1.9, 15mm f2.7 $ 395 00
CINE SPECIAL 1" f1.9, 15mm f2.8, axc cond 425 00
AURICON PRO sound camera, complete, lists over $1,600, our price 1,195 00
AURICON CINEVOICE sound camera, LN 525 00
SPECIAL DOUBLE-SYSTEM OUTFIT
AURICON CT70 sound camara, 200 ft cap sync motor, galvo, completely blimped perfect
AURICON RT70 optical recordar, "A" or "B" wind
AURICON NR/22 amplifier, mike, cables, headset All in perfect operating condition $1,195 00
FILMO 70A, 1" f3.5 Cooke 49 50
CINE KODAK "A" camera and projector 147 50
NATCO 3015 16mm sound projector 145 00
NATCO 3030 16mm sound projector 165 00
RCA 400 16mm sound proj, excellent 325 00
AMPRO UA 16mm sound projector, as is 95 00
VICTOR 25 16mm sound projector, as is 72 50
TRIPODS
F&B Liteweight friction pan and tilt 60 00
FEARLESS heavy duty spring-balanced 395 00
MIRACLE heavy duty, hydraulic, metal 195 00
PRO JR geared pan & tilt 155 00
NEW ARRIFLEX ball head pan & tilt 250 00
F&B ARRIFLEX hi-hat & tripod adapter 29 50
AURICON 6-foot folding mika boom 95 00
NEW F&B 16/35mm clock timer 14 95
FILMOTION 16mm pictura viewer 67 50
MOVIOLA, 16mm ULPVCS, composite and separate sound, 8x10" preview screen WRITE
EVERY ITEM SOLD IS MONEYBACK GUARANTEED
WE BUY — SELL — RENT

F&B FLORMAN & BABB
70 West 45th Street, New York 19, N.Y.
Phone: Murroy Hill 2-2928
Cable Address—FLORBABB, N.Y.

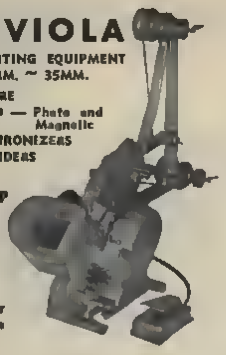
Bargains Galore — in this month's Classified Ads on Page 46

EVERYTHING PHOTOGRAPHIC AND CINEMATIC
FOR PROFESSIONAL AND AMATEUR
The World's Largest Variety of Cameras and Projectors Studio and Laboratory Equipment with Latest Improvements as Used in the Hollywood Studios New and Used BARGAINS


HOLLYWOOD CAMERA EXCHANGE
1600 Cahuenga Boulevard
HO 9-3651 • Hollywood, Calif. • Cable Hocamex

MOVIOLA
FILM EDITING EQUIPMENT
16MM. ~ 35MM.
- PICTURE
- SOUND — Photo and Magnetic
- SYNCHRONIZERS
- REWINDERS

Model LP for 16mm. Picture

Write for Catalogue



MOVIOLA MANUFACTURING CO
1451 Gordon St. • Hollywood 28, Calif

RUBY CAMERA EXCHANGE
Rents . . Sells . . Exchanges
Everything You Need for the
PRODUCTION & PROJECTION
of Motion Pictures Provided by a Veteran Organization of Specialists
35 mm. . . . . 16 mm.
Television
IN BUSINESS SINCE 1910
729 Seventh Ave., New York 19, N Y
Tel· Circle 5-5640
Cable Address RUBYCAM

SPARKLING COLOR FOR YOUR PRINTS
Expert timing by color craftsmen plus the careful attention accorded your film in our famous "personalized service" will give you unsurpassed prints whose brilliance makes them alive on the screen
Write for Information
Dept. C-11
TELEFILM, INC.
8038 Hollywood Boulevard
Hollywood 28, California

Lap-dissolves, wipes, montages, titles, cartoons, miniatures, chemical machine fades, and optical negative duplicating
RAY MERCER & CO.
4241 Normal Ave • Hollywood 29, Calif
Send for Free Optical Effects Chart

nently to the focus knob casting, and the fine adjustment knob of the camera lens is broached to fit the serrated output fitting of the Servo motor unit

The specifications of torque and speed were refined by addition of motion response accuracy and balance position accuracy and the electronic design was assigned to two experienced Servo electronics engineers, Maurice Franco and Irving Sofen of RCA.

With minor modifications of both the mechanical and electronic prototypes the system is now a practical solution to this problem, conforming to the design specifications outlined above.

It is readily apparent in designs of this type that mechanical and electronic considerations must be approached simultaneously with the science of each necessarily becoming aware of the problems and limitations of the other.

With the assistant cameraman now able to actuate the lens with precision from a point removed from the camera, the Director and Cinematographer may now make use of the camera position viewpoint to a greater extent; both in floor level dolly shots and overhead boom shots. END

PLAN SCENES IN SEQUENCE

(Continued from Page 28)

of interest, because it is at night in bed that I come up with my best ideas for interesting sequences. I ask myself, "Now, how can I shoot this place effectively, and yet use the scenes as a background for human action of one sort or another?" I always strive for a novel un hackneyed approach

For example, up at Harrison Lake in British Columbia, the resort featured sports—bowling on the green, tennis, horse-back riding, swimming, boating, etc. I arrived early in the afternoon and browsed about until sunset without making a shot. I couldn't, because I was too busy gauging effective camera angles, figuring which were morning and which were afternoon shots, and looking the guests over for possible "actors."

I went into action right after dinner by taking the assistant manager of the hotel into my confidence. He introduced me to a dozen or so guests who had appealed to me as actors and I "contracted" with them for various times of the day depending upon whether they were tennis players, swimmers, etc. One of the hotel waitresses was an excellent equestrienne, so she was told she needn't serve at lunchtime next day, because the horseback sequence was slated for noon At the time these arrangements were made, I hadn't the foggiest idea what I was going to do with all that talent!

There are moments between the time one gets into bed and finally falls asleep that are priceless when it comes to getting a proper slant on many things, and I have found that this is the ideal time for writing a mental scenario. That night I went over every camera angle, and visualized the guests acting out my scenes against the most photogenic backdrops the resort afforded. I broke the sequences down into longshots, medium shots and closeups and before I went to sleep had everything committed to memory.

Next morning at nine, the two young couples who were to enact the scenes leading up to the tennis sequences were on hand with all their sports paraphernalia and I made shots of one of the couples walking down a path in the hotel's flower garden. They reached a point where they stopped and looked around for their friends. The camera discovers the friends—the second couple—seated on a grassy slope in an expectant attitude, then cuts back to the first couple who sight their friends and run toward them A medium shot shows the foursome exchanging greetings, after which they walk toward the tennis court. The camera then goes on a Cook's tour by itself as shots of the court and of the games in progress were made. This sounds long, but it really is a short sequence.

Other sequences were made showing the highlights of bowling on the green, as well as swimming and horseback riding. Naturally, the latter sequence was used to feature the best of the resort's lake and mountain viewpoints, and each of the sequences began in a novel way. The sub-title, "At Harrison Lake, the accent is on sports—such as—" and then there are separate subtitles for "Bowling on the Green." "Tennis," "Horseback Riding," and the last category, "—and Flirting!" This latter sequence shows the assistant manager of the hotel stalking a blonde guest as she walks about the grounds He overtakes her on a garden bridge and asks her if she will share a motorboat ride with him. She answers, "No, No, a thousand times No!" and as she shakes her head melodramatically, the scene lap-dissolves into a shot of both of them during a motorboat ride, and they are obviously enjoying it immensely. This scene ends the Harrison Lakes section of this film which became "Hail, British Columbia!"

The reason I have waxed reminiscent is that there are so many possible ways to devise sequences beyond those which are most frequently used that it is impractical to make suggestions without knowing the facts surrounding a particular moviemaking problem. I can tell

you how certain conditions—such as those which I found at Harrison Lake—will lend themselves to cine treatments of one sort or another, but it is impossible to establish standards for rule of thumb use in shooting.

For those interested in a set of rules which they can count off on their fingers, the following may be of help:

1. Do not make shots of any nature without a previously conceived plan of action.
2. Go over the area carefully, noting viewpoints, salient characteristics of the scenes, position of the sun at various times of the day, and give particular consideration to evaluation of the cine material and possible subjects who may be persuaded to work in the scenes.
3. Ponder over the facts which came to light during the inspection tour. This is the time for origination and visualization of ideas. Do not waste thought on the sensational shots you would like to make *but can't*. Stick to the available material and devise ways of heightening interest in it by means of a sequence which will employ a fresh approach to the subject.
4. Get away from the simple pictorial reporting approach of the average amateur by surprising your audience occasionally with a shot or a sequence which tickles their risibilities. "Make them laugh," is the best advice which an amateur can follow. More about this later.
5. Try to make every sequence the embodiment of visual images which were formed in your mind as the result of caprice. This does not mean that your approach should be coy or whimsical—but it is a fact that inspirations spring from the capriciousness of one's mind. A skeleton was propped up on the piano in front of Chopin as he wrote his famous Funeral March! If you get a lift out of devising a sequence, perhaps some of the fun may rub off on the audience.
6. Each sequence should be a neat package with the story thread firmly understood in the initial scene and with each shot a bit more interesting than its predecessor. Stick to the point throughout without digressing and, if you can, introduce a note of finality to the last scene in a sequence so that shifting into another sequence will appear to be natural. Shoot the individual scenes in a sequence in the order that they will be spliced into the finished movie; not to save editing—but principally because you will work without a script and may neglect to film an essential scene.

Laughs are hard to come by in an

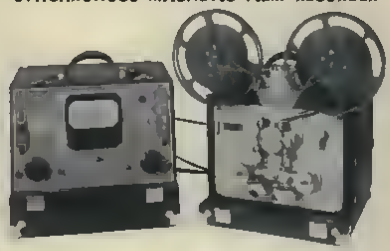
(Continued on Page 45)

PRODUCERS--be independent!

Do Your Own Sound Recording With A

MAGNASYNC

SYNCHRONOUS MAGNETIC FILM RECORDER



$1,275
F.O.B.
LOS ANGELES

- Records on either 16mm or 17½mm single or dbl-perforated film
- Full 1200 ft. film capacity; footage counter for film logging
- Sync motor drive—may be adapted to interlock
- Compact, portable—weighs only 39 pounds

Write for free descriptive brochure

Magnetic Recorders Company

7120 Melrose Ave. Los Angeles 46, Calif.
Phone WEbster 3-5545

The West's Largest Recorder Sales Company

Model M52

SENSITESTER

★ **IMMEDIATE DELIVERY**
to the lab owner interested in—

QUALITY
EFFICIENCY
ECONOMY

- **DUAL MACHINE**
  1—Sensitometer
  2—Scene Tester
- **HIGHLY ACCURATE**
  Electronic timer unaffected by climatic changes.
- **NEW TYPE LONG-LIFE**
  Cold Light Exposure Unit
- **WITHOUT ADDITIONAL EXPENSE** will match any printer

- **$1675.00 35mm Model**
- **$1875.00 35mm-16mm Combination Model**

F.O.B. Hollywood, Calif.

ART REEVES MOTION PICTURE EQUIP.
7512 Santa Monica Blvd.
Hollywood 46 California

Current Assignments of A.S.C. Members

Major film productions on which members of the American Society of Cinematographers were engaged as directors of photography during the past month

★ ★ ★ ★ ★ ★ ★ ★

Allied Artists

• HARRY C. NEUMANN, "Jalopy," with Leo Gorcey, Huntz, Hall, Jane Easton, the Bowery Boys. William Beaudine, director.

Columbia

• HENRY FREULICH, "Conquest of Cochise," (Esskay Pics.) (Technicolor), with John Hodiak, Robert Stack, and Joy Page William Castle, director

• LESTER WHITE, "49 Men," (Esskay Pics.) with John Ireland, Richard Denning and Suzanne Dalbert Fred F. Sears, director.

Metro-Goldwyn-Mayer

• GEORGE FOLSEY, "The Band Wagon," (Technicolor) with Fred Astair, Cyd Charisse, Vincente Minnelli, director

• WILLIAM MELLOR, "Give A Girl A Break," (Technicolor) with Marge and Gower Champion, Debbie Reynolds Stanley Donen, director

• ROBERT SURTEES, "Mogambo," (Technicolor) with Clark Gable, Ava Gardner, Grace Kelly and Douglas Sirden John Fnrd, director

• RAY JUNE, "A Slight Case of Larceny," with Mickey Rooney, Eddie Bracken, Elaine Stewart, and Marilyn Erskine Don Weis, director

• JOSEPH RUTTENBERG, "Latin Lovers," (Technicolor) with Lana Turner, Ricardo Montalban, John Lund, Louis Calhern, Jean Hagen, Beulah Bondi, Eduard Franz, Rita Moreno, and The Mndernaires. Mervyn LeRoy, director

• HAROLD LIPSTEIN, "The Great Diamond Robbery," with Red Skelton, Cara Williams, James Whitmore Dorothy Stickney, Adolphe Menjou, Reginald Owen, and Horace McMahon Robert Z. Leonard, director

• HAL ROSSON, "Years Ago," with Spencer Tracy, Jean Simmons, Teresa Wright, Tony Perkins, Kay Williams, and Mary Wickes George Cukor, director

Paramount

• GEORGE BARNES, "Little Boy Lost," with Bing Crosby, Claud Dauphin, Nicole Maurey, Chris Fourcade. George Seaton, director

• LIONEL LINDON, "Here Come The Girls," (Technicolor) with Bob Hope, Tony Martin, Arlene Dahl. Claude Binyon, director

• RAY RENNAHAN, "Arrowhead," (Technicolor) with Charlton Heston, Jack Palance, Katy Juradn, Michael Keith, Mary Sinclair, Michael Shannon Judith Ames, and Milbura Stone. Charles Marquis Warren, director

• DANIEL FAPP, "(Untitled)" with Dean Martin, Jerry Lewis. Donna Reed, Barbara Bates, Doa Porter, and Joseph Calleia. Norman Taurog, director.

Republic

• JOHN L. RUSSELL, JR., "City That Never Sleeps," with Gig Young, Mala Powers, Edward Arnold, Marie Windsor, and Wally Cassell Producer director, John H. Auer.

AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED January 8, 1919, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios Its membership also includes nonresident cinematographers and cinematographers in foreign lands Membership is by invitation only

Officers and Board of Governors

CHARLES G. CLARKE, President
FRED W. JACKMAN, Exec. Vice-President
ARTHUR EDESON, First Vice-President
VICTOR MILNER, Second Vice-President
LEE GARMES, Third Vice-President
WILLIAM SKALL, Treasurer
JOHN W. BOYLE, Secretary
MILTON KRASNER, Sergeant-at-Arms
JOHN ARNOLD
ROBERT DEGRASSE
ALFRED GILKS
HAL MOHR
SOL POLITO
RAY RENNAHAN
JOSEPH RUTTENBERG
LEON SHAMROY

Alternate Board Members

JOSEPH BIROC
NORBERT BRODINE
WILLIAM DANIELS
PAUL EAGLER
SOL HALPRIN
WINTON HOCH
FRED W. JACKMAN
CHARLES ROSHER
PHILLIP TANNURA
JAMES VAN TREES

20th Century-Fox

• JOE MACDONALD, "Nearer My God To Thee," with Clifton Webb, Barbara Stanwyck. Thelma Ritter. Jean Negulesco, director

• LUCIEN BALLARD, "The Desert Rats," with James Mason, Richard Burton, Robert Newton, Chips Rafferty, Charles Tingwell, and James Lilburn Robert Wise, director.

• HARRY WILD, "Gentlemen Prefer Blondes," (Technicolor) with Jane Russell, Marilyn Monroe, Charles Coburn, Elliott Reid, and George Winslow. Howard Hawks, director

• CHARLES G. CLARKE, "Fight Town" (Technicolor) with Jeanne Crain, Dale Robertson, Richard Boone, Carol Mathews and Carl Betz. Harmon Jones, director

• LEON SHAMROY, "White Witch Doctor," (Technicolor) with Susan Hayward, Robert Mitchum, Walter Slezak Henry Hathaway, director

Universal-International

• MAURY GERTSMAN, "The Golden Blade," (Technicolor) with Rock Hudson, Piper Laurie, Gene Evans, Kathleen Hughes, and Edgar Barrier. Nathan Juran, director.

• RUSSELL METTY, "The Prince Of Bagdad," (Technicolor) with Victor Mature, Mari Blanchard, Guy Rolfe, Virginia Field, Palmer Lee, Ludwig Donath, Jim Arness, Nick Cravat, Charles Arnt, and Howard Petrie. George Sherman, director.

• CLIFF STINE, "East Of Sumatra," (Technicolor) with Jeff Chandler, Marilyn Maxwell, Anthony Quinn, John Sutton, Jay C. Flippen, and Eugene Iglesias Budd Boetticher, director

• CHARLES BOYLE, "The Stand At Apache River," (Technicolor) with Stephen McNally, Julia Adams, Hugh Marlowe, Hugh O'Brian, Russell Johnson, and Joclynne Greene Lee Sholem, director

• CARL GUTHRIE, "Stopover," with Barbara Stanwyck, Richard Carlson, Maureen O'Sullivan, Richard Long, Marica Hendersoa, Lori Nelson, and Billy Gray Douglas Sirk, director

Warner Brothers

• EDWIN DUPAR, "The System," with Frank Lovejoy, Robert Arthur, Dan Seymour, and Victor Perrin Lewis Seiler, director.

• ROBERT BURKS, "The Grace Moore Story," (Technicolor) with Kathryn Grayson, Walter Abel, Merv Griffin, Ann Doran, and Rosemary DeCamp Gordon Douglas, director.

• WILFRED CLINE, "Calamity Jane," (Technicolor) with Doris Day, Howard Keel, Allyn McLerie, Dick Wesson, and Philip Carey David Butler, director.

Independent

• JAMES WONG HOWE, "Main St. To Broadway," (Cinema Prodns.) with Tallulah Bankhead, Olivia de Havilland, Faye Emerson, H. Foada, R. Harrison, M. Martin Tay Garnett, director.

• JOSEPH BIROC, "Harness Bull," (Sequoia Pictures) with Edward G. Robinson, Joan Vohs, and Edward Binns Arnold Laven, director

• NICK MUSURACA, "The Blue Gardenia," (Gottlieb Preds.) with Anne Baxter, Richard Conte, Ann Southern, Raymond Burr, Jeff Donnell, Richard Erdman, Ray Walker, and Nat King Cole. Fritz Lang, director

• HARRY STRADLING, "A Lion Is In The Streets," (Cagney Prod.) (Technicolor) with James Cagney, Barbara Hale Ann Francis, Lon Chaney, Jr., Frank McHugh, Mickey Simpson, John McIntire, Raoul Walsh, director.

• STANLEY CORTEZ, "China Gold," (Wisberg-Pollexfen Prod.) with John Archer, Hillary Brooke, Noel Cravat, and Philip VanZandt A. Wisberg and J. Pollexfen, producers-directors.

• JOHN ALTON, "The San Quentin Story," (Swartz-Doniger Prod.) with Louis Hayward, Joanne Dru, Paul Kelly, Maureen O'Sullivan, George MacReady and Horace McMahon. Walter Doniger, director

• STANLEY CORTEZ, "The Neanderthal Man," (Wisberg-Pollexfen Prod.) with Richard Crane, Robert Shane, and Doris Merrick E. A. Dupont, director

'PRODUCTION VALUE'

(Continued from Page 22)

Granted that a film has a good script, capable actors, and an efficient production crew—the resulting picture still depends upon the presentation of these elements for the generally good, bad, or indifferent impression it creates when flashed upon the screen. It is for this reason that the *photography* of a feature production is so important—for it is the camera through whose eye the story is actually presented.

The photography cannot, of course, compensate for a poor script or faulty direction, but it can do a great deal to impart quality to a picture that might otherwise be merely adequate. In the same way, unimaginative camera work can detract from the most expensive and lavishly mounted extravaganza.

Looking back at such recent artistic and equally popular films as "Our Lady of Fatima," "The Four Poster," "Scaramouche," "Snows of Kilimanjaro," and "My Cousin Rachel," we find that none of these films could be termed an "extravaganza." There were no breath-taking sets, no casts of thousands, no gigantic, colossal, or stupendous effects calculated to transfix the audience. Yet each of these films bore the stamp of quality, plus an atmosphere of richness in presentation—an effect which in almost every case can be traced to a combination of intelligent set design and outstanding camera work.

Considering production value from the standpoint of the camera, we find that the director of photography has three elements with which to work, in addition to the actual physical equipment which he uses to expose the film. These elements are: lighting, composition, and camera movement—and the way in which he uses them accounts for the quality of the final photographic result.

Imagination and careful pre-planning are two factors that help the efficient cinematographer to get the most from the equipment he is using. Often he is assigned to a picture a day or two before shooting begins, and thus is not allowed sufficient time to prepare his lighting and photographic plans for the picture. In such a case, the film is bound to suffer photographically to a greater or lesser degree.

But where the cinematographer is given the script well in advance and has time to carefully plan the photography, he can work out patterns of lighting, composition and camera movement that will present the story on the screen to best advantage, and at the same time convey an impression of greater production value.

C. ROSS

FOR

LIGHTING EQUIPMENT

Inkie and Arc Lamps including Required Accessories
Ganarators—Cablas—Boards—Baxes

•

Raby Camara Crane—Dollies—Blimps—Gaared Haads

•

GRIP EQUIPMENT

FOR LOCATION AND STUDIO

Parallals—Steps—Platform Laddars
Cantery Stands—Raflectors—Flags—Scrims

•

SOLE EASTERN MOLE-RICHARDSON CO. DISTRIBUTOR

RENTALS • SALES • SERVICE

•

CHARLES ROSS, Inc.

333 WEST 52nd STREET

NEW YORK 19, N.Y. Circle 6-5470-1

Precision Built Combination

Magnetic Film and Tape Sound Reader

Features Simple threading polished stabilizer drum with needle bearings combination film rollers for 16mm, 17.5mm, 35mm and ¼-inch tape machined to conform with SMPTE standards, and equipped with oilless bearings precision ground shafts Magnetic head mount with adjustments for track locations, azimuth, and magnetic film and tape thickness dimensions 6x6x7½

Amplifier 117-volt—60-cycle—AC . . . power output—4 watts heavy duty Alnico V speaker . . . safety fused . . . pilot light . . . 6-ft heavy duty line cord

Net Price $198.00 F.O.B. Factory, N.Y.

PRECISION LABORATORIES

244 West 65th Street, New York 23, N. Y.

Taking the three photographic elements one by one, we can see how each contributes to the quality of the final result. *Lighting* is perhaps the most important single factor, for light is the medium with which the cameraman "paints" his scenic compositions. In a cheap picture, flat, unimaginative lighting is generally used, because that is the quickest and least expensive way to light a set. The result, however, *looks* cheap on the screen. If the cinematographer on a picture of this type were given sufficient time to study the script, the settings, and the action to be filmed, he could work out a lighting pattern with depth, modeling, and richness—and the resulting film would show a good deal more quality on the screen.

Similarly, *composition* is an important factor that is often neglected both in high and low budget pictures. Good composition amounts simply to putting the dramatic emphasis of a scene in its proper place. The top-notch cinematographer achieves this result by making sure that the lines within his frame, the perspective of the camera angle,

and the pattern of movement on the screen—all lead toward the focal point of the action. Again, pre-planning allows the cinematographer to chart effective composition in advance, so that he is not forced simply to set up the camera quickly and shoot every scene from a straight-forward, undramatic angle

The third factor, *camera movement*, is too often thought of as an "expensive" element, since moving camera shots take more time to set up, rehearse, light and photograph This seeming extravagance is, however, balanced by the fact that it is often possible to lace together by means of camera movement as many as five scenes that would otherwise require separate setups. Certainly smooth camera movement, correctly motivated, is a device that adds fluent quality to a photoplay and carries the story forward more effectively.

Producers of low-budget films invariably economize by engaging mediocre talent to place a mediocre story on the screen within restricted number of shooting days The result almost always is a mediocre film—but the system has flourished because the double feature policy has demanded a constant flood of good, bad and indifferent product in order to fill the exhibitors' schedules. However, present-day audiences are more critical than they used to be, and are now prone to criticize technical shortcomings as well as dramatic faults in a film.

In production ranks this trend has inspired two reactions First, several of the major studios have announced the intention of making only "A" pictures in the future, thus falling back on the faulty *more-money-more-quality* line of reasoning Second, and much more significant, certain low-budget producers have decided to engage top-notch talent and to save money by intelligent preplanning to cut down wasted time in production.

Speaking of the relationship between the camera and production value, director of photography Lee Garmes, ASC, recently observed: "The camera can produce an aura of quality by pointing up the strong points of the production, while at the same time minimizing its inadequacies The result depends upon a happy blending of composition, lighting and camera movement. I believe in *under-lighting* in order to stimulate the audience's imagination Correct use of low-key, silhouette and shadow allows the audience to complete in its own mind the idea that the writer and director are trying to put across. To light a set brilliantly in order to show everything at once would destroy that effect"

Thus it may be seen that production value depends in great measure upon proper camera emphasis and atmospheric lighting, as well as upon making the most efficient use of the story elements at hand, be they lavish or modest. Careful pre-planning in every phase of production, teamwork between director and cinematographer, plus the use of top-notch technicians—all of these factors figure heavily in the impression of quality that reaches the screen. It is these elements and not towering budgets that create real production value. END

'5000 FINGERS'

(Continued from Page 17)

dungeon, and the nightmarish aspect of the Mound Country and the weird butterfly men who pursued him.

Here color was deliberately underplayed; indeed for the most part there was little or no color in the sets. Only the boy appeared in full color against the negative backgrounds—a photographic innovation which becomes a pictorial delight on the screen

The pictorial effectiveness of the dungeon scenes, wherein a score of demented, mouldy-looking musicians play fantastic instruments, is enhanced by striking use of colored light and green, luminous makeup. When first he shot this scene, Planer employed conventional set lighting—with disappointing results He changed the lighting pattern completely, lowering the key and adding color to the light Here also he employed ultraviolet and fluorescent light with great effectiveness.

Another interesting innovation was that employed by Planer when shooting closeups of the characters of the Mound Country To enhance the illusion of moonlight, a narrow beam of colored light was directed on the eyes of the men—a different color for each one

An unsuccessful attempt was made to photograph the familiar stage technique of reversing the coloring of subjects by painting them with luminous paint and then switching from regular incandescent to ultraviolet light. Only in the closeups did the transition register completely; it wouldn't record at all on the film in medium and long shots. The reason, Planer learned, is that it was impossible to build up any appreciable illumination volume with ultraviolet light..

For all closeups, other than those mentioned immediately above, Frank Planer used his familiar Houdini eyelight, a narrow, hand-held incandescent unit which he employs to cast the small pin-point of sparkling light that gives life to the eyes of players in closeups. This, Planer handles himself, crouching just below the lens hood of the camera and directing the light on eyes of the player as necessary

Planer is loud in his praise of the new Columbia cone lights The quality of illumination they give is the most ideal for color photography, he says, adding that conventional harsh lighting invariably takes away some of the quality of color

"The use of cone lights," said Planer, "made it easier to light those sets which called for the addition of matt shots at the top. The piano courtyard set especially, while it extended clear to the ceiling of the sound stage, was heightened further pictorially in the finished result through effective matt shot photography This called for a special quality of lighting on the overall set, and this the cone lights provided most successfully."

In analyzing the photography of "5000 Fingers," Planer said the aim from the very beginning was to picture the scenes and players from the viewpoint of a child, employing fantasy through lighting and camera treatment. "In short what we sought photographically was the effect of a typical Walt Disney cartoon, done in live action"

The Stanley Kramer Company produced "The 5000 Fingers of Dr. T" for Columbia Pictures Corporation. Directed by Roy Rowland the picture features Peter Lind Hayes, Mary Healy, Hans Conreid and Tommy Rettig Filmed in Technicolor, the production is scheduled for release in April, 1953.

TECHNIQUES FOR EXTERIORS

(Continued from Page 19)

it will be found that when using even the smallest lens opening the scene will be overexposed In this case, there are two ways of cutting down exposure. One is to use *neutral density filters* of optically ground grey glass that absorb all colors in equal relative proportion. The other alternative is to cut down shutter angle Most 35mm professional cameras and some 16mm cameras (such as the Cine Kodak Special and the Pathe-16) have variable shutters which make possible compensating for light conditions by reducing the shutter opening and consequently the amount of light reaching the film.

There is more to using an exposure meter than merely pointing it at the scene to be filmed. Many cameramen do just that, and then wonder why their exposure is so far off

First you must decide what elements of the scene you are principally exposing for When people appear in the composition, obviously you must be mainly concerned with the rendition of skin tones Therefore, the principal reading should be taken just a few inches from the subject's face. Other readings, taken from camera position, etc., should be balanced to favor this principal reading.

Second, a meter usually "sees" a wider angle than that encompassed by the camera lens Therefore, it is necessary to take most meter readings from a position closer to subject than camera position.

On this same subject, it should be pointed out that excessive sky areas in a scene are especially misleading when you are taking a meter reading The sky is usually overly-bright in relation to the rest of the scene, and will tend to boost a meter reading higher than it should be for exposing the actual subject. For this reason, it is wise to tilt meter downward a bit (at about a 30° angle) in order that the cone of focus will cover more foreground and less sky background.

Most cameramen are aware of the importance of a good sunshade over the lens, which will prevent strong light from causing *flare*. The element of an exposure meter is similarly affected when scattered rays of light fall upon its unshaded surface, causing a deceptively bright reading of the scene. Therefore it is advisable to shade the meter cell opening either with your hand, or with a home-made cardboard shade in order to achieve a more faithful reading.

Filters have three primary purposes:

a. To correct the rendition of certain colors
b. To cut down the amount of light reaching the film
c. To produce special pictorial effects.

In any event, filters should not be used just for the sake of using them, but always with a specific purpose in mind.

First, use filters to *correct* certain color tones, notably to darken skies and water and thus keep them from "burning up" the composition, Yellow and orange filters, used in this way, add a certain richness to exterior scenes and provide a pictorial contrast between flesh tones and the sky. Red filters, overcorrecting blue tones, darken the sky dramatically, but must be used very carefully, as they tend to "wash out" skin tones unless special make-up is used.

The second function, that of *cutting down exposure*, is achieved, as we have pointed out, through the use of neutral density filters. These filters are available in varying densities from 25% to 200% They also tend to flatten out contrast to a greater or lesser degree depending upon the density of filter used

The third function of filters, that of producing *special pictorial effects*, is used in simulating night effects outdoors in daylight, and in fantasy films

(Continued on page 44)

1952 BOX SCORE

(Continued from Page 21)

William Snyder
"The Korean Story," RKO
"Blackbeard The Pirate," RKO

Clifford Stine
"Almost Married," U-I
"Ma and Pa Kettle at the Front," U-I.
"Abbott and Costello Go To Mars," U I
"Law and Order," U-I
"East of Sumatra," U-I

Archie Stout
"Big Jim McLain," W B
"The Sun Shines Bright," Rep
"Alma Mater," W B

Harry Stradling
"Hans Christian Andersen," Goldwyn
"Angel Face," RKO
"Forever Female," Para
"A Lion In The Streets," Cagney W B.

Walter Strenge
"Mr Walkie Talkie," Hal Roach, Jr

Karl Struss
"Limelight," Chaplin
"Tarzan and the She Devil," Lesser.

Robert Surtees
"The Merry Widow," MGM
"Tribute To A Bad Man," MGM.
"Vaquero," MGM.
"Mogambo," MGM.

Leo Tover
"We're Not Married," Fox
"My Wife's Best Friend," Fox.
"Big Man," Fox
"The President's Lady," Fox

Paul Vogel
"The Girl In White," MGM
"Days Before Lent," MGM.
"You For Me," MGM
"Rogue's March," MGM
"The Clown," MGM.
"The Girl Who Had Everything," MGM.

Joseph Walker
"Affair In Trinidad," Col.

Gilbert Warrenton
"Lost Women Of Zarpa," Howco Prod.

Lester White
"White Lightning," Allied Artists
"49 Men," Col.

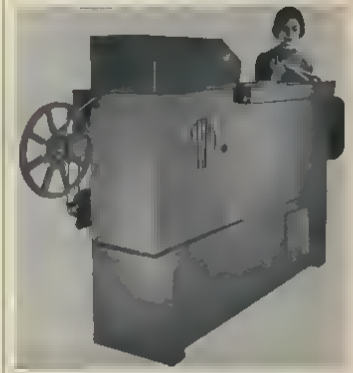
Harry Wild
"Beautiful But Dangerous," RKO
"Breakup," RKO
"Gentlemen Prefer Blondes," Fox

END

Bridgamatic
FILM PROCESSING EQUIPMENT

is easy to handle
AND
Pays Big Dividends, too!

Producers, TV Stations, Photo Finishers, Colleges and Microfilmers find this portable machine a true "one man lab," which pays its way every day.



BRIDGAMATIC STRAIGHTLINE "Add-A-Unit" idea lets you buy the basic machine with stainless steel tanks, then add re-circulation, aeration, refrigeration, replenishment, filtration, etc as needed Costs little more than old fashioned, cumbersome slow acting rack and tank methods BRIDGAMATIC removes the "guess," saves valuable time, protects precious negatives, produces cleaner pictures Develops and dries ready for showing same day events occur

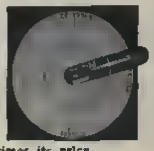
Reversal, 16/35mm and 70mm models, black and white or color. Prices start at $1095

• *Write for illustrated brochures*

S.O.S. CINEMA SUPPLY CORP.
Dept F, 602 West 52nd St., New York 19
Cable: "SOSOUND"

Ready-Eddy
Trademark
QUICK ACCURATE
FOR EVERY DAY USE

1001 Ready Sound-Film Editing Data
• Footage • Frame Count • Screen Time • 35mm and 16mm equivalents
Plastic computer for every one in movies and TV, from script to screen



$2.00
(Delivered in U S A)
Worth many times its price
WRITE or ask your dealer
READY-EDDY, Sandy Hook, Conn

TECHNIQUES FOR FILMING EXTERIORS

(Continued from Page 43)

for creating weird dream sequences, etc. For night effects, the red filters (23A, 25A, 29F, 70, and 72) are most widely used. For softer night effects in sunlight, a combination of 50B with 23A is quite effective. For the fantasy effects mentioned 25A, 29F, 70, 72, and 88A filters are used with infra-red film.

In outdoor filming, especially in bright sunlight, there is a naturally harsh contrast between the light and shade areas of the composition. This contrast is especially unflattering in close-ups of persons. In order to soften the harsh effect and fill in the shadow areas, we use simple reflectors that can be easily constructed by pasting squares of silver or gold foil onto plywood flats.

Correctly used, these reflectors impart a professional *finish* to the film—but if over-used, they may cancel out shadow areas almost completely, creating a flat and undramatic result. Be careful to use your reflectors intelligently, since it takes a certain amount of soft shadow to give a pleasant modeling to faces.

There are two kinds of reflector surfaces: the hard variety (silver), and the soft (gold). Soft reflectors give a nice smooth quality in close-ups, but should not be used in color cinematography, since they reflect an unusually warm color of light.

Closely allied to reflectors in usefulness to the cameraman are *scrims* of gauze netting which are helpful in diffusing sunlight when it falls too harshly upon faces in close-ups. These scrims, either single or double depending upon the amount of diffusion desired, are suspended out of camera range, between the sun and the subject, and function to break up and soften the harsh direct rays of the sun.

Often unwanted reflections from some surface such as a white wall, etc., may cause your subject to squint. This glare can be softened in many cases by placing a *gobo* (black square of wood or plyboard) between the subject and the offending surface.

For diffusing close-ups a diffusion disc is very helpful—but a layer or two of gauze net placed before the lens will give almost the same effect. In using net as a diffuser, be careful that it is well-shielded, as sunlight falling directly upon it will cause flare. Also, be sure that the net is placed as close to the lens as possible, otherwise the criss-cross pattern of the cloth may come into focus just sharply enough to be noticeable.

Volumes can, and perhaps *should*, be written on the subject of composition in motion pictures. We cannot hope in this small space to discuss the subject at great length, but feel it necessary to present a few basic rules for making exterior screen compositions more effective.

Cinema composition is not the static thing it is in still photography. Screen composition is fluid and ever changing; therefore, it requires a more precise, more versatile kind of planning in order to insure visual patterns that will remain interesting throughout the action of an entire sequence.

But aside from adding interest to the visual presentation of the story, the function of effective composition is to lead the eye directly to the most important point in the scene. For this reason, action should be so staged that the lines of the setting in which it is played will lead to the areas of greatest dramatic importance.

A *closed* composition is one which is framed on all sides (by trees, etc.) in such a way as to prevent the eye from straying from the focal point of action. This kind of foreground framing, besides aiding dramatically is also effective pictorially in lending depth to the scene.

In the case of a *pan* or *dolly* shot, always plan in advance your separate compositions for each camera *stop*, then plot in the camera movement that will tie these separate compositions together. As for movement within the scene, it is a basic tenet that lines of action leading straight across the screen are less potent dramatically than those originating near one of the corners of the frame and leading into it diagonally. A line of action or static design leading into the pattern from the lower left hand corner of the screen is considered to be the strongest single line of composition.

Similarly, it is undramatic to divide the frame equally in half either horizontally or vertically by any compositional line (such as a tree or the horizon). By mentally dividing a scene into thirds both ways, and placing the focal point of interest at any of the intersections of these imaginary lines, we evolve a composition that is much more effective than one that is divided into halves.

In shooting snow exteriors, the primary problem is to cut down the extreme brightness contrast ratio between the white snow and the shadow areas. This problem of reducing harsh contrast also applies to desert and seascapes.

In the case of snow in bright sunlight, the brightness contrast of the scene is tremendous. Add to this the substantial amount of light reflected from the white surface, and you have a good deal of light to contend with.

Various filters and filter combinations have been used by professional cinematographers to soften snow scenes so that they do not "burn up" on the screen. Some of these filters and their effects are described below:

3N5 (a combination of Aero 1 and 50% Neutral Density filters) gives a light color correctness to the sky without increasing contrast of the remainder of the scene.

5N5 (a combination of Aero 2 and 50% Neutral Density filters) — gives medium sky correction without excessive contrast. It has the same basic action as 3N5, but with added detail. It is used to soften strong glare and contrast in snow scenes having heavy shadows.

X2 and 23A filters super-imposed. This combination darkens skies and produces a pleasant softness that cuts contrast between snow and shadow.

If any errors must be made in ex-

Kinevox Powers Rose Parade Float Organ

KINEVOX, INC. came to rescue when Fletcher Aviation Corp., builder of the "Song Of India" float for 1953 Tournament of Roses Parade in Pasadena, required a dependable power supply to furnish 110-v AC current for Korla Pandit's organ, the amplifying system and a tape recorder. A Kinevox portable Power Supply, engineered especially to meet the precise requirements of motion picture sound recording, was installed on float. It functioned perfectly and continuously during the three-hour parade. Float won the Mayor's Trophy for best float from Pasadena. Fletcher Aviation electronics engineer George Jackson is shown before the Power Supply in photo above right.

posing snow scenes, they should preferably be made toward the underexposed side of the scale.

It is our intent in this brief treatise to give the student of cinematography the benefit of some of the experiences and practices of the professional, in order that he may better apply professional methods to his own camera work. As with all skills, it is the persistent application of procedures that make for perfection—diligent study that makes such applications successful.

The foregoing article is condensed from "The Cinema Workshop," by Charles Loring.

PLAN SCENES IN SEQUENCE

(Continued from Page 39)

amateur film, but sometimes they pop up unexpectedly during the filming without having been planned. They usually are the result of a sudden change of mood and are most spontaneous when the picture is following a serious vein and, without warning, something very droll or ridiculous happens. During the filming of "Land Snakes Alive!" my camera was trained upon a boy six years old who was playing with a four foot long non-poisonous snake. The boy had bare arms and shoulders, and the snake crawled over his shoulders, then down his chest, and eventually started to crawl under his arm. The audience was always aghast to see such a young boy handling the snake. When the snake touched the boy's underarm it tickled, and the boy jumped and giggled, then looked apologetically in the direction of the camera because he knew he had spoiled the scene. That was what *he* thought, but it gets a laugh every time, and so the scene was left in.

It is fun devising sequences with laughs in mind, but it must be borne in mind that laughter is an involuntary spasm of the respiratory organs and people don't laugh because they want to. They won't laugh because you want them to, either, unless you *make* them laugh. There are two ways of doing this, the sudden change of mood already described, and the more familiar, though seldom analyzed system wherein one funny action or event follows another so rapidly that one's nervous system has to throw off the excess of emotion in the pleasant way Nature has provided.

It helps very much when a moviemaker understands the mechanics of laughter, but it is not very often an amateur produces a comedy which employs the difficult cumulative laugh system. It is better to stick to sequences which are simple to film, and which involve basic human emotions.

If the action in a Christmas movie shows Father, tipsy, indulging in too much holiday spirit, his antics will not get a laugh. But if he enters the living room and tries to assist Mother in wrapping up Christmas presents, and contrast shots are made showing Mother's perfect wrapping technique, and then Father's befuddled attempts at wrapping the presents — the quick changes from the sublime to the ridiculous might provoke laughter.

The effectiveness of comedy and other sequences will depend upon the imagination of the moviemaker, for it is only by thinking the action through scene by scene that the little twists and personal touches can be introduced into the footage. By all means, think in terms of sequences, do not starve them, and make each one fit like a gem within the framework of your movie.

WHAT'S NEW

(Continued from page 10)

Groverlite, announces that these two items of motion picture lighting equipment will henceforth be made and distributed by Natural Lighting Corp., 2753 El Rohle Dr., Los Angeles, 41, Calif. New additions to the Groverlite models are soon to be introduced for the TV field, according to Grover.

FGB Announce Two New Items — Florman and Babb, distributors of movie and TV equipment, 70 West 45th St., New York City, announce the distribution of two new important items of motion picture equipment: the Kelly Cine Calculator, and the foreign-made Angenieux Retrofocus wide angle lens. The latter is an extreme W/A lens, 9.5mm with an aperture of f/2.2, and said to have excellent resolution and contrast. It is very critical for back focus and must be accurately mounted for optimum results. Available immediately in C mounts, list price of lens is $175.00.

The Kelly Cine Calculator is a pocket-size slide-rule in disc form possessing a great deal of information usually found in pages of handbooks. Data available at a glance includes Depth of Field, Hyperfocal Distance, Aperture Scales, Field of View, Filter Factors, and Film Speeds Per Second—plus many others. The calculator comes in two models—35mm model, and 8-16mm model for cine photographers. List price is $3.95.

Norwood Meters — Director Products Corporation, New York City, announces that the Norwood Director exposure meter will be available in Europe after January 1st.

Attention! BOLEX H16 OWNERS

To One of the World's Finest Cameras, You May Now Add

A VARIABLE SHUTTER UNIT

- Full range from **open** to **closed** at any camera speed
- 3 convenient intermediate stops: ¾ open, ½ open and ¼ open enable you to expose from 1/18 sec. at true 8 fps at open to 1/560 sec. at ¼ open at true 64 fps
- Make complete transition lap dissolves anytime
- Fade ins and fade outs at your fingertips
- Neutral density filters no longer needed when filming outdoors with fast film
- Audible warning sound when shutter in **closed** position when filming forward or hand-cranking either way
- Avail yourself of the many other advantages obtainable only with a controlled variable shutter speed
- Give your next movies that sparkling professional touch

PRICES (within U.S.)
Cameras with inside frame counter $ 99.60
Cameras with outside frame counter $109.80
Price includes camera transportation back to you, insurance coverage, and one year guarantee. (Local and state taxes where applicable, extra)

Send for free detailed informative booklet, "Variable Shutter Units for Bolex H16"

TULLIO PELLEGRINI
1545 Lombard Street
San Francisco 23, Calif.

16mm & 8mm
Motion Picture Service

16 mm *Reduced* to 8 mm
8 mm *Enlarged* to 16 mm
16 mm Duplicates
8 mm Duplicates
Color and Black and White
35 mm slide duplicates and film strip service

GEO. W. COLBURN LABORATORY, INC.
164 North Wacker Drive, Chicago 6, Illinois

Scheibe FILTERS
In World-Wide Use

Produce moonlight and night effects in daytime • fog scenes • diffused focus and many other effects.
Information mailed on request.

SCHEIBE FILTERS COMPANY
ORIGINATORS OF EFFECT FILTERS
P O Box 16834, Hollywood 46, Calif.

CLASSIFIED ADVERTISING

RATES: 10c per word—minimum ad $1.00. Words set in capital letters, 15c per word. Display format 90c per line.

STUDIO & PRODN. EQUIP.

MORE SPECIALS FROM S.O.S.

MOVIOLA UPX 35mm Composite sound/pictura with separate saundhead. Rebuilt $1 350 00

DEPUE 35mm DOUBLE HEAD Continuous Sound and Picture Printer. Rebuilt 2,950 00

NEW FILM EDGE NUMBERING MACHINES, 16 or 35mm 1,995 00

BRIDGAMATIC 216B DEVELOPER, 1800 positiva per hour. Second 1 795 00

NEW FILM EDGE WAXING MACHINES 1,075 00

SCHUSTEK 180HI DPTICAL 35/16 Picture Reduction Printer, rebuilt 2,995 00

MOY 35mm Step Printer, as is 135 00

B & H SPECIALIST Camera w/3 lenses, 2 finders, 2 motors, 2 mags. $3,000 value 1,995 00

NEW PRDF. TITLER and Accessory Kit, $250 value 159 50

MITCHELL FRICTION Freehead 325 00

WALL MOVIETONE 35mm Single System outfit, $7,000 value 3,995 00

35mm SYNCHRONIZER, 4 gang 89 50

BACKGRDUND SCREEN, translucent, 15' x 20' useable 150 00

FEARLESS SINGLE SYSTEM 16mm Sound Camera w/lens, turret, dessolva 4 mags., pilot pins, rackover 2 motors, Maurar galvo $8,000 valua 3 995 00

5000 Watt SUN SPDTS on rolling stands 49 50

BDLEX VARIABLE SHUTTER attachment, naw from 99 50

NEW CDLLUX COLOR Temperature Meter. Reads Kalvin, foot candles. Compact 2½" face, compl w/6 filters, case 275 00

CDNVERTERS 12V/110V AC, 2000 watts for recorders etc 99 50

CASH PAID FOR USED EQUIPMENT
TRADES TAKEN

S.O.S. CINEMA SUPPLY CORPORATION
602 W. 52nd Street, New York 19
Dept. F Cable **SOSOUND**

FOR SALE

WE BUY, SELL AND RENT PROFESSIONAL AND 16mm EQUIPMENT, NEW AND USED. WE ARE DISTRIBUTORS FOR ALL LEADING MANUFACTURERS. RUBY CAMERA EXCHANGE, 729 Seventh Ava., New York City. Established since 1910

AUDIO-AKELEY single system sound camera complete with Akeley sound head, Gyro Tripod, 3 lenses, view finder, Maurer mixing amplifier. Complete with cables, power supply and W. E. microphone. CAMERA EQUIPMENT CO., 1600 Broadway, New York 19, N.Y. Cable Cinequip

BASS ... **Chicago** Cinema headquarters for 43 years offers money saving buys in guaranteed used equipment. 16mm Zoomarcompleta "C" mt. and Cine Special with close-up attach. List $1650.00—Price $750.00. Pan Cinor 20mm to 60mm for Bolex or adaptable to BGH 70DA. List $447.50—Price $325.00. Cine Special I single sprocket, 1" F 1.9 15mm F 2.7 W.A., $395.00, BGH 70DA, 1" F 1.5 Wollensak 15mm F 2.7 E.K. w.a., 3" F 4 B&H Talate Comb. Case $247.50, Bolex H 16 1" F 1.4 Blatar, 2 F 3.5 Cooke 3" F 2.5 Wollensak $325.00, 8mm Bevere 99 Turret, F 2.8 BGL lens $52.50, BASS SPECIAL. Brand new Revere Mod. 55 case. List $73.50—Net $52.50. Best buys ... best trades always. **BASS CAMERA CO.**, Dept. 179 W. Madison St., Chicago 2, Ill.

BARDWELL McALISTER lighting equipment. Accessories. Feed Cables. Spider Boxes. Gebo clamp attachments. Alligator clamps with barn doors. SCHOEN & CROWE, 403 W. 47th Street, New York 36, N.Y.

16MM REVERSAL PROCESSOR, used, 20 ft. per minute. FAMOUS FONDA TOP FRICTION DRIVE, excellent condition, first $3500.00 gets it. Two old Metiegraph Delux Projectors in fair running condition. Make offer. METAL MASTERS, 4584 68th St., San Diego 15, Calif.

Bell & Howell 35mm Standard Perforator tools, some new, some slightly used.

6 — Punches
15 — Pilots
8 — Dies Complete

BEST OFFER

ALPINE CAMERA CO.,
4119 W. North Avenue Chicago 39, Ill.

FOR SALE

WALL 35mm SINGLE SYSTEM SOUND CAMERA, refinished, like new, guaranteed. Complete with 40, 50, 75 and 100mm F2.3 coated lenses, Modulile galvanometar, Auricon amplifier complete with microphona, necessary cables, mike tripod, camera tripod, erect image view finder, two 1,000-faot magazines. $7,000. CAMERA EQUIPMENT COMPANY, 1600 Broadway, New Yark 19, N.Y.

PROCESSING MACHINES AND PARTS. All sizes film rollers in stock. Chemical pumps, Mixing tanks, new and used.

METAL MASTERS
Division of Wall Laboratories
4584 68th St., San Diego 15, Calif.

16MM HOUSTON processing machine. Model K1A. Like new. List $5,500.00. Bargain at $3,500.00. CAMERA EQUIPMENT CO., 1600 Broadway, New Yark 19, N.Y.

16MM NEWSREEL negatives and fine grains G.D.P. and DEM conventions, 12,000' sound and silent. Complete coverage. Box 1164, AMERICAN CINEMATOGRAPHER.

30 ROLLS (800 FT.) SINGLE perforated Scotch brand magnetic 16mm film. No. 116—New. UNIVERSITY OF MINNESOTA, % Purchasing Dept., Minneapolis 14, Minn.

16MM DOUBLE film feed systems—sync projectors. Sales and service on all types of motion picture equipment. SUBURBIA FILMS, 1650 John Street, Fort Lee, N.J.

WANTED

IMMEDIATE CASH PAYMENT FOR CAMERAS AND EQUIPMENT

NEED EYEMOS (SINGLE LENS AND TURRET), MITCHELLS, ARRIFLEX, DE BRIES, B&H STANDARDS AND HI-SPEEDS, WALLS, AKELEYS, CINE SPECIALS, AURICONS, MAURERS, FILMOS ALSO BALTARS, COOKES AND OTHER LENSES. SOUND STAGE, LABORATORY AND EDITING EQUIPMENT OF ALL TYPES REQUIRED. PLEASE SHIP INSURED OR FORWARD DESCRIPTIONS AIR-MAIL. IMMEDIATE PAYMENT

GORDON ENTERPRISES • 5362 N. Cahuenga
NORTH HOLLYWOOD, CALIFORNIA

AKELEY CAMERA AND INSTRUMENT CORP.

175 Varick Street

New York 14, New York

— Established 1914 —

Designers and manufacturers of silent and sound motion picture cameras with 225° shutter opening, (288° shutter opening for television use), gyro tripods and precision instruments. Complete engineering and machine shop facilities for experimental work, model and production runs.

INQUIRIES INVITED

WANTED

WANTED TO BUY FOR CASH
CAMERAS AND ACCESSORIES

MITCHELL, B & H, EYEMO, DEBRIE, AKELEY. ALSO LABORATORY AND CUTTING ROOM EQUIPMENT

CAMERA EQUIPMENT COMPANY
1600 BROADWAY, NEW YORK CITY 19
CABLE: CINEQUIP

WANTED

ALL 16-35MM PRODUCTION EQUIPMENT FROM CAMERA TO SCREEN. LABORATORY AND EDITING EQUIPMENT. LENSES. LIGHTING EQUIPMENT. WILL ACCEPT USED EQUIPMENT IN TRADE

THE CAMERA MART, INC.
1845 Broadway New York 23, N.Y.

WANTED

Mitchell — Akeley — B & H — Wall — Eyemo Cameras — Lenses — Equipment

NATIONAL CINE EQUIPMENT, INC.
209 West 48th St., New York, N.Y.

WE'RE ON THE LOOK OUT FOR
Auricon Pros, Moviolas, B & H Printers, Maurer Recorders, Lighting Equipment

WE'LL TRADE OR TAKE CONSIGNMENTS
SET YOUR OWN PRICE — WE'LL GET IT

Western Union Private Wire—WUX New York

S.O.S. CINEMA SUPPLY CORPORATION
Dept. F Cable **SOSOUND**
602 W. 52nd Street, New York 19

F&B PAYS MORE
FOR USED 16/35MM EQUIPMENT
WRITE — WIRE — PHONE
FOR OUR CASH OFFER

FLORMAN & BABB **MU. 2-2928**
70 W. 45TH ST. **NEW YORK 36, N.Y.**

LABORATORY & SOUND

SOUND RECORDING at a reasonable cost. High Fidelity 16 or 35. Quality guaranteed. Complete studio and laboratory services. Color printing and lacquer coating. ESCAR MOTION PICTURE SERVICE, INC., 7315 Carnegie Avenue, Cleveland 3, Ohio. Phone ENdicott 1-2707.

16M/M REVERSAL PROCESSING black and white only. $3.00 per hundred feet. Equipment handles 1,000 feet per hour of high speed film. High standard of quality. SOUNDEX MOTION PICTURES, 319 THUSS AVE., NASHVILLE 11, TENN.

SLIDES, PHOTOS & FILMS

NATURAL COLOR SLIDES, Scenic, National Parks, Cities, Animals, Flowers, etc. Set of eight $1.95. Sample & List 25c. SLIDES - Box 2DE, La Habra, California.

FRUSTRATED FOTOGRAPHERS! Fill the gaps in your vacation Kodachroma record. Choose from 1,000 travel scenes. Free List, sample, 30c. Write today. KELLY 1. CHODA, Box 5, Los Alamos, New Mexico.

CAMERA & SOUND MEN

16 M/M cameraman available for coverage of Southern territory. Twenty years experience as 16mm photographer, editor and sound recording. Industrial and Medical. MARCUS WHITAKER, 319 Thuss Ave., Nashville 11, Tenn.

NEW ENGLAND — assignments or production, sound, 16 and 35mm equipment. SAMUEL KRAVITT, 1096 Chapel St., New Haven, Conn.

PROFESSIONAL FILMING IN BRAZIL!
Completely equipped Cine Specials, Auricons, Bell & Howells. Any 16mm assignments in B&W or color. Any where in Brazil. HELICON, Ave. Ipiranga 1248, Sao Paulo, Brazil.

Night in day...

The best moonlight is the light of the noondoy sun . . .

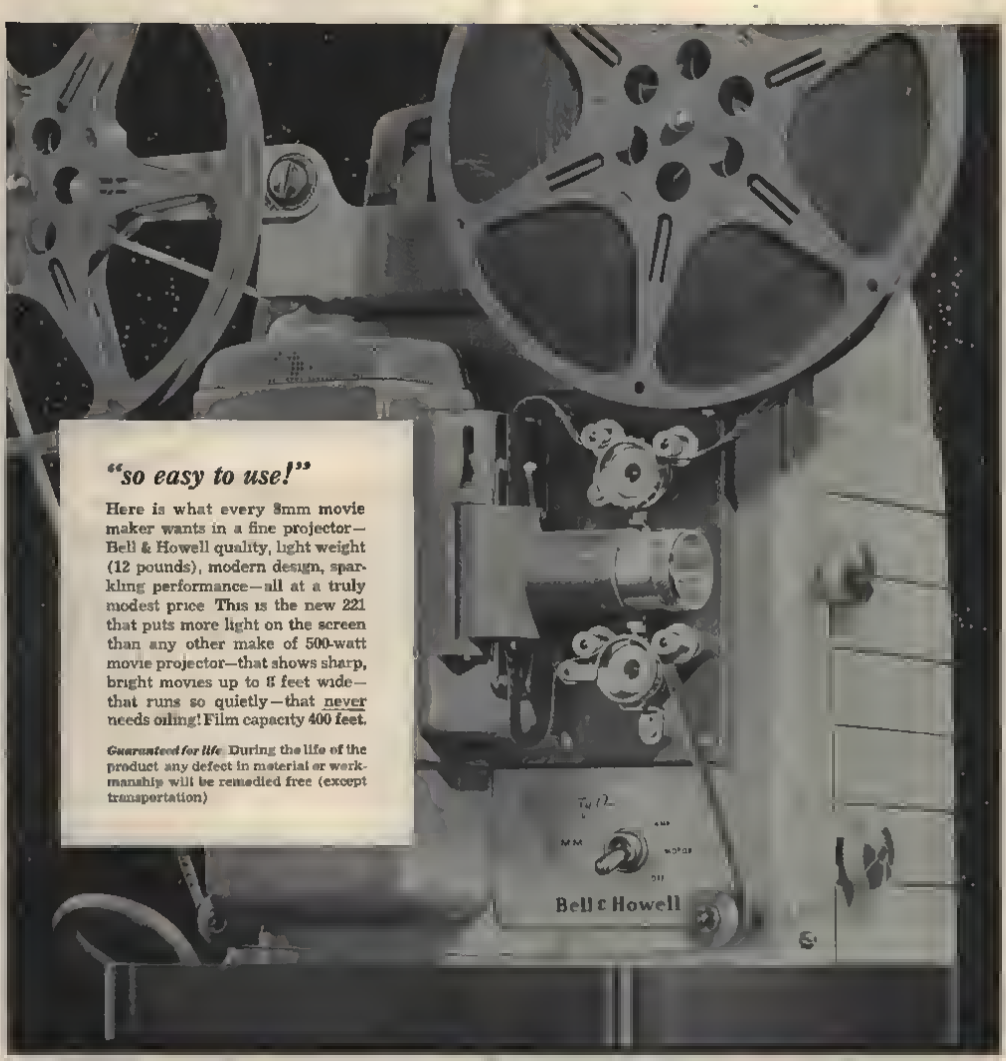
Obvious, of course, to an industry trained in modern cinematographic technics. Equally obvious is the need for infinite care in the choice of film and filters—in keying film and situation in co-ordinating method and result desired in processing.

To help solve problems such as these, representatives of the Eastman Technicol Service for Motion Picture Film are trained to advise—are ready and able to roll up their sleeves and lend a hand wherever necessary.

In maintaining this service, the Eastman Kodak Company has branches at strategic centers . . invites inquiry on all phases of film use from all members of the industry. Address: Motion Picture Film Department, **Eastman Kodak Company**, Rochester 4, N. Y. *East Coast Division*, 342 Madison Avenue, New York 17, N. Y. *Midwest Division*, 137 North Wabash Avenue, Chicago 2, Illinois *West Coast Division*, 6706 Santa Monica Blvd., Hollywood 38, California.

DEBUT!

It's the fabulous, new Bell & Howell 8mm home movie projector!



"so easy to use!"

Here is what every 8mm movie maker wants in a fine projector—Bell & Howell quality, light weight (12 pounds), modern design, sparkling performance—all at a truly modest price. This is the new 221 that puts more light on the screen than any other make of 500-watt movie projector—that shows sharp, bright movies up to 8 feet wide—that runs so quietly—that never needs oiling! Film capacity 400 feet.

Guaranteed for life. During the life of the product any defect in material or workmanship will be remedied free (except transportation)

"precision-built"

This new projector is precision-built in true Bell & Howell tradition to give a lifetime of trouble-free performance. And it's so easy to use that every member of the family can show movies effortlessly. Most Bell & Howell dealers offer liberal terms and trade-ins.

$99.95

Bell & Howell

makes it fun to make (and show) movies!